In the United States Court of Federal Claims

Nos. 93-655C, 93-6568, 93-6578, 93-6582, 97-5837, 97-5845[1]
Filed: January 24, 2025

ANAHEIM GARDENS, et al.,

***Plaintiffs*,**

v.

THE UNITED STATES,

***Defendant*.**

Harry J. Kelly, *III*, Nixon Peabody LLP, Washington, DC, for the Plaintiffs.

Amanda L. Tantum, Senior Litigation Counsel, *A. Bondurant Eley*, Senior Litigation Counsel, *Emma E. Bond*, *Tate N. Walker*, *Brittney M. Welch*, and *Joshua W. Moore*, Trial Attorneys, *Franklin E. White*, *Jr.* Assistant Director, *Patricia M. McCarthy*, Director, and *Brian M. Boynton*, Acting Assistant Attorney General, Commercial Litigation Branch, Civil Division, United States Department of Justice, Washington, DC, for the Defendant.

[1] This case has been combined under No. 93-655. The corresponding case numbers are: 93-6568 (*Cedar Gardens Associates*); 93-6578 (*Rock Creek Terrace, L.P.*); 93-6582 (*3740 Silverlake Village, L.P.*); 97-5837 (*Buckman Gardens, L.P., et al.*); and 97-5845 (*Chauncy House Company*). Buckman Gardens, L.P. filed along with its individual general and limited partners and thus Case No. 97-5837 contains additional named Plaintiffs. For purposes of efficiency, this Opinion refers to Buckman Gardens, L.P. and its individual general and limited partners as "Buckman Gardens, L.P." This judgment applies to each, and the Clerk is directed to enter judgment accordingly.

POST-TRIAL OPINION AND ORDER

TAPP, Judge.[2]

In this regulatory takings case, First Wave Plaintiffs' ("FWPs") expert testimony suffers from irredeemable flaws. Absent Excel columns, inconsistent use of formulaic inputs, and murky explanations are only a few of the problems plaguing un-replicable expert testimony by FWPs on the economic impact of the colloquially-known Preservation Statutes.[3] Applying *Penn Central* and the damages metrics established by the Federal Circuit and the U.S. Supreme Court, the Court determines that FWPs have not carried their burden to establish entitlement for a regulatory taking.

I. Procedural History

This case began in a year marking the nation's first female Attorney General, the inauguration of Bill Clinton, and the World Trade Center bombing. (*See* ECF No. 1). The FWPs here are a subgroup of the original Plaintiffs, some of whom have been dismissed or whose claims have been adjudicated over the years. Only now, following innumerable fits-and-starts, are these FWPs' claims ripe. The thirty-one-year delay, without resolution of FWPs' claims, has engendered expected results—the loss and compromise of important evidence. (*See* Hearing Transcript ("Hr'g Tr.") 16:1–3, Oct. 15, 2024, ECF No. 790 (FWPs' counsel noting the loss of witnesses)).

Most of the procedural history has been previously summarized. *See Anaheim Gardens, L.P. v. United States*, 953 F.3d 1344 (2020) ("*Anaheim Gardens*, *L.P.*"); *Anaheim Gardens v. United States*, 140 Fed. Cl. 72 (2018) ("*Anaheim Gardens (2018)*"); *Anaheim Gardens v. United States*, 125 Fed. Cl. 88 (2016). This case follows the most recent appeal in *Anaheim Gardens*, *L.P.*, after the Court of Federal Claims granted summary judgment to the government on all six of the FWPs' claims. 953 F.3d at 1347; *see Anaheim Gardens (2018)*, 140 Fed. Cl. at 95. Only the directly relevant portions of the procedural history are encapsulated here.

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[2] This case was originally assigned to and tried by Judge Patricia Campbell-Smith, and following her retirement, was transferred to the undersigned on October 25, 2023. (*See* ECF No. 724). Judge Campbell-Smith presided over the trial but did not issue a post-trial opinion. (*See* ECF Nos. 641, 643, 645, 650, 653, 655, 658, 666, 670, 672, 674, 691, 693, 695). To ensure clarity, the trial transcript is cited fully throughout this Opinion using volume number, speaker, and date. For example, pages 1118:15–23 of the transcript correspond to January 17, 2023, are located in volume six of the transcript, and are cited as "Trial Tr. vol. 6, Trout, 1118:15–23, Jan. 17, 2023." The first citation to the transcript in the Opinion will also contain the ECF number. Transcripts for other proceedings are cited using the same pattern.

[3] The Preservation Statutes are formally known as the Low-Income Housing Preservation and Resident Homeownership Act ("LIHPRHA") and the Emergency Low-Income Housing Preservation Act of 1987 ("ELIHPA").

In *Anaheim Gardens*, *L.P.*, the Federal Circuit upheld the decision granting judgment against one of the FWPs (620 Su Casa Por Cortez) but remanded the remaining five FWPs. 953 F.3d at 1347. Earlier, the trial court determined that the FWPs did not provide sufficient evidence under the economic impact factor of the *Penn Central* test. *See Anaheim Gardens (2018)*, 140 Fed. Cl. at 89–94; *Penn Central Transportation Co. v. City of New York*, 438 U.S. 104 (1978). This was based on a finding that the FWPs' expert witness, Dr. William Wade ("Dr. Wade") presented a nonprobative analysis of the Preservation Statutes' economic impact. *Anaheim Gardens (2018)*, 140 Fed. Cl. at 89–94. The Federal Circuit observed that the trial court determined that Dr. Wade's "lost income analysis was nonprobative because he was required to analyze and compare fair market values" and failed to do so. *Anaheim Gardens*, *L.P.*, 953 F.3d at 1352 (citing *Anaheim Gardens (2018)*, 140 Fed. Cl. at 89). This Court's predecessor judge also took issue with Dr. Wade's methodology "because it [was] inconsistent with binding precedent" particularly related to "the parcel as a whole concept" and "economic loss severity measures." *Anaheim Gardens (2018)*, 140 Fed. Cl. at 89–91. The Federal Circuit rejected the Court of Federal Claims' analysis regarding Dr. Wade, which provides the basis for the issues addressed in this decision.

Prior to *Anaheim Gardens (2018)*, cases involving the Emergency Low-Income Housing Preservation Act ("ELIHPA"), Pub. L. No. 100–242, 101 Stat. 1877 (1988) and the Low-Income Housing Preservation and Resident Homeownership Act ("LIHPRHA"), Pub. L. No. 101–625, 104 Stat. 4249 (1990), 12 U.S.C. §§ 4101–4147, bounced back and forth between the Court of Federal Claims and the Federal Circuit for decades. The two most relevant of these cases are *Cienega X* and *CCA Associates. Cienega Gardens v. United States*, 503 F.3d 1266 (Fed. Cir. 2007) ("*Cienega X*"); *CCA Associates v. United States*, 667 F.3d 1239 (Fed. Cir. 2011). *Cienega X* established additional parameters for measuring economic impact and investment-backed expectations in ELIHPA and LIHPRHA takings cases, and *CCA Associates* applied the precedent set forth in *Cienega X*. *See Cienega X*, 503 F.3d at 1280–90; *CCA Assocs.*, 667 F.3d at 1244–48.

In *Cienega X*, the Federal Circuit delineated two possible approaches for measuring economic impact: (1) compare "the market value of the property with and without the restrictions on the date that the restriction began (the change in value approach)[;]" and (2) "compare the lost net income due to the restriction (discounted to the present value at the date the restriction was imposed) with the total net income without the restriction over the entire useful life of the property (again discounted to present value)." *Cienega X*, 503 F.3d at 1282. The *Cienega X* Court also noted that neither approach "appears to be inherently better." *Id.* at 1282. In *Anaheim Gardens*, *L.P.*, the Federal Circuit also confirmed that neither of these approaches are "inherently better" and that Dr. Wade's use of the second approach "was in accordance, at least broadly speaking, with a method for measuring economic impact that this court has expressly endorsed." *Anaheim Gardens*, *L.P.*, 953 F.3d at 1354 (citing *Cienega X*, 503 F.3d at 1282). The Federal Circuit stated that the FWPs "may attempt to prove the economic impact of the Preservation Statutes on their property interests by demonstrating their lost opportunity to earn market-rate rental income after prepaying their mortgage" which "is what Dr. Wade did in his expert report." *Anaheim Gardens*, *L.P.*, 953 F.3d at 1354.

In *Anaheim Gardens (2018)*, the Court of Federal Claims was concerned that Dr. Wade's methodology "substitute[d] the owner's equity portion of the entire property for the parcel as a

whole." *Anaheim Gardens (2018)*, 140 Fed. Cl. at 91. However, the Federal Circuit found this to be false, and that "Dr. Wade used a *net* present value as the denominator of his equation, with 'net present value' representing 'present value' of future cash flows *subtracted* by 'equity.'" *Anaheim Gardens*, *L.P.*, 953 F.3d at 1355 (emphasis in original). Therefore, Dr. Wade did not substitute the equity for the parcel as a whole in the denominator, he substituted equity out of the denominator. *Id.* The trial court was concerned with Dr. Wade's reduction of the denominator in his equation, which increased the economic impact. *Anaheim Gardens (2018)*, 140 Fed. Cl. at 91. However, the Federal Circuit noted that "every choice by an expert to use one input over another will necessarily increase or decrease the final number." *Anaheim Gardens*, *L.P.*, 953 F.3d at 1355. The Federal Circuit ultimately noted that "questions remain as to whether Dr. Wade's methodology was consistent with principles of economics and whether his explanation for using that approach is credible" and directed the Court of Federal Claims to "evaluate [Dr. Wade's] credibility and persuasiveness when he explains why he used net present values." *Anaheim Gardens*, *L.P.*, 953 F.3d at 1355–56.

The Federal Circuit disagreed with the trial court's conclusion that Dr. Wade's opinions were illogical primarily because they resulted in calculated losses that were larger than the appraisal values that determined the sale price under the LIHPRHA, but noted that "there are unresolved fact questions regarding the accuracy of the appraisals and the proper measure of the FWPs' losses . . . ." *Id.* at 1356. Finally, the Federal Circuit discussed the issue of *ex ante* versus *ex post* data, explaining that while the trial court did not reach the issue and that the Federal Circuit could not decide it in the first instance, there is no law indicating a preference for *ex ante* or *ex post* data, but that *ex ante* data "may be preferable in some cases for policy reasons" like "to avoid post hoc fluctuations . . . ." *Id.* at 1357 (internal emphasis and citation omitted). On remand, the Federal Circuit tasked this Court with deciding the "unresolved fact questions" related to the FWPs methodology and credibility. *See id.* at 1355–57. Following remand but before trial, Dr. Wade died. The Court tried FWPs' claims before Judge Campbell-Smith, and at that trial, FWPs relied on Dr. Robert Trout as their economic expert. Despite making post-trial evidentiary rulings, Judge Campbell-Smith did not issue a post-trial opinion regarding the merits.

Shortly after the case was transferred to the undersigned, FWPs sought admission of demonstratives and associated charts and tables from their experts' reports, each of which had been excluded by Judge Campbell-Smith. (FWPs' Mot. for Admis., ECF No. 730; Evidentiary Rulings Order at 26–27, ECF No. 709; *see also* Order Denying Admission, ECF No. 750). Judge Campbell-Smith previously determined that any conditionally admitted exhibits were "not admitted into evidence" until they were ruled admissible during or after trial. (Revised Virtual Trial Mgmt. Order at 6, ECF No. 623). Following trial, Judge Campbell-Smith excluded the demonstratives. However, FWPs argued that reassignment of the case to the undersigned constituted "new circumstances" and admission of the demonstratives would help the Court evaluate the testimony of the FWPs' new expert, Dr. Trout, who replaced Dr. Wade. (FWPs' Mot. for Admis. at 7–12; *see also* Order Denying Admis.). FWPs also argued the demonstratives were not inadmissible hearsay because they were "visual summaries" of Dr. Trout's detailed trial testimony. (FWPs' Mot. for Admis. at 10). Finally, FWPs argued that even if the demonstratives were hearsay, the residual hearsay exception applied, and the United States would not be prejudiced by the admission. (*Id.* at 11–12).

Despite the FWPs' earlier assurances that the Court could appropriately assess the credibility of all witnesses based on the transcript of the trial conducted before Judge Campbell-Smith, the FWPs moved to recall Dr. Trout pursuant to RCFC 63.[4] (FWPs' Rule 63 Mot., ECF No. 743). The FWPs explained that if the Court let their previously excluded exhibits in, the new testimony from Dr. Trout would not be necessary.

> The Court: So we're right back to the issue of you want me to reconsider the issue. If we have the charts and demonstratives, it sounds like you're saying, well, we don't need to recall Dr. Trout, then.
>
> FWPs' Counsel: We've said that all along, Your Honor.
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> [. . .]
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> The Court: So if I stun the United States and say, well, yeah, it'd be more convenient for me just to look at the demonstratives, you guys are going to pack up and you're going to go back and say, well, we don't need a Rule 63 new trial date for Dr. Trout.
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> FWPs' Counsel: That's absolutely correct.

(Hr'g Tr. 22:22–23:6–11, Jan. 24, 2024, ECF No. 749). Ultimately, the Court denied FWPs' Motion for Admission of the demonstratives at issue because the FWPs failed to establish either element of FRE 807 and the residual hearsay exception did not apply.[5] (Order Denying Admis. at 3–5).

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[4] RCFC 63 states:

> If a judge conducting a hearing or trial is unable to proceed, any other judge may proceed upon certifying familiarity with the record and determining that the case may be completed without prejudice to the parties. In a hearing or a trial, the successor judge must, at a party's request, recall any witness whose testimony is material and disputed and who is available to testify again without undue burden. The successor judge may also recall any other witness.

[5] The following exhibits constitute the excluded demonstratives: PDM B, PDM C, PDM D, PDM E, PDM F, PDM G, PDM H, PDM I, PDM J, PDM K, PDM L, PDM M, PDM N, PDM O, PDM P, PDM Q, PDM R, PDM S, PDM T, PDM U, PDM V, PDM W, PDM X, PDM Y, PDM Z, PDM AA, and PDM BB, PDM CC and slide 12 of PDM DD. The Court finds, however, that even if these exhibits were admitted, it would not affect the Court's credibility determination herein, and thus, the final decision would remain unchanged. Curiously, though the Court declined to reverse the evidentiary admissibility course plotted for these demonstratives by Judge Campbell-Smith, the Court did not preclude their use as *demonstrative* aides during the Rule 63 hearing. Yet FWPs did not utilize them as such. From the Court's perspective, that failure undercuts any claim of prejudice arising from their exclusion from evidence. If those proposed exhibits were not valued

As a result, the FWPs then resumed their argument that a Rule 63 hearing was necessary "to provide testimony about two material and disputed issues, the severity of FWPs' injury and the economic losses suffered by FWPs." (FWPs' Rule 63 Mot. at 1). FWPs were concerned about the Court's ability to evaluate Dr. Trout's testimony without also "examining the expert charts and tables, and related demonstratives . . . ." (*Id.* at 3). FWPs argued that "deciding this 30-year-old case, based on the trial transcript, but without the benefit of looking at the charts and demonstratives, would make the Court's job more difficult and would prejudice FWPs." (*Id.* (citing FWPs' Mot. for Admis. at 5–6)). In response, the United States noted that prior to the Rule 63 Motion, FWPs had previously "resist[ed] the presentation of additional live testimony" and that FWPs' Motion was an "attempt to persuade the Court to reconsider a correct ruling from the previous trial judge excluding [FWPs'] expert reports as hearsay . . . ." (Def.'s Resp. to FWPs' Rule 63 Mot. at 7, ECF No. 746).

The Court acquiesced to FWPs' Rule 63 Motion; the parties re-presented their expert testimony, (ECF Nos. 777, 779), and submitted post-hearing briefs, (ECF Nos. 781–82).[6] However, this supplemental testimony demanded by FWPs, failed to enhance Dr. Trout's credibility, instead highlighting inconsistencies from earlier explanations of Dr. Wade's methodology, and exposing, for the first time, that one of Dr. Wade's graphics utilized by Dr. Trout at trial, omitted data necessary to complete the mathematical calculation of damages. Against thirty-one years of litigation, the Court now makes the following findings of fact and conclusions of law.[7]

II. Findings of Fact

Much of the background of this extended litigation is undisputed. (*See* Joint Stipulations of Facts ("JSOF"), ECF No. 546). FWPs Buckman Gardens, L.P. ("Buckman Gardens Partnership"), Chauncy House Company ("CHC"), Cedar Gardens Associates ("CGA"), Rock Creek Terrace, L.P. ("Rock Creek Partnership"), and 3740 Silverlake Village, L.P. ("3740 Silverlake"), are designated as the FWPs to distinguish them from the remaining Second-Wave Plaintiffs ("SWPs"). Each alleges a constitutional takings claim against the United States Department of Housing and Urban Development ("HUD") based on the enactment of ELIHPA and LIHPRHA. Additional findings may be set forth in the remaining portion of the Opinion as necessary to develop the conclusions of law.

The history of ELIHPA and LIHPRHA have been previously summarized by this Court and the Federal Circuit. *Anaheim Gardens v. United States*, 125 Fed. Cl. at 93; *Anaheim Gardens*, *L.P.*, 953 F.3d at 1344–49; *CCA Assocs.*, 667 F.3d at 1239–43*; Cienega X*, 503 F.3d at 1270–76. Congress first enacted the National Housing Act in 1934, in response to concerns about

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as demonstratives, it is difficult to understand their probative, non-hearsay, value as admitted exhibits.

[6] The Court certifies its familiarity with the record and determines that this case may be completed without prejudice to the parties given the additional expert testimony and briefing. RCFC 63.

[7] Two of these FWPs are comparatively young at a mere twenty-seven years since filing.

the declining stock of affordable housing. (JSOF at ¶ 1); *see also* Eric J. Buescher, *Home Robbery: Congress and HUD's Taking of Private Property in Affordable Housing*, 7 GEO. J.L. & PUB. POL'Y 571–95 (Summer 2009). The National Housing Act established the Federal Housing Administration which became part of HUD. (JSOF at ¶ 1 (citing *Cienega X*, 503 F.3d at 1266, 1269, 1270 n.1)). In 1961, Congress amended the National Housing Act to create incentives for private investors to participate in the affordable housing market. (JSOF at ¶ 2–3, citing *Cienega X*, 503 F.3d at 1270). These regulatory and incentive programs became known as the Section 221(d)(3) and Section 236 programs. (JSOF at ¶ 2). The Section 221(d)(3) and 236 programs incentivized private investors to develop and maintain affordable housing by providing them with below-market rate subsidized interest rates, mortgage insurance, and tax benefits. (*Id.* at ¶ 3; *see Cienega X*, 503 F.3d at 1270–71, 1270 n.1). The HUD mortgages were for forty-year terms and included an option for the investors to prepay the mortgage and exit the program after twenty years. (JSOF at ¶ 3 (citing *Cienega X*, 503 F.3d at 1270)). The prepayment option was a particularly attractive enticement; early prepayment of the mortgages and conversion of rent-controlled properties to market rate rentals permitted far greater economic returns on initial investments. Not surprisingly, numerous investors relied on the government's promises.[8] As years passed, this particular pledge by the United States proved illusory.

Congress became concerned that Section 221(d)(3) and 236 investors would prepay their mortgages and withdraw from the affordable housing programs. (JSOF at ¶ 5 (citing *Cienega X*, 503 F.3d at 1266)). Therefore, Congress enacted ELIHPA in 1988 and LIHPRHA in 1990. (JSOF at ¶¶ 6−8). ELIHPA was designed as a temporary measure, whereas LIHPRHA was planned as a "permanent measure." (*Id.* at ¶¶ 7−8). In enacting these statutes, Congress sought to "balance the public policy need to preserve housing for low-income families with the perceived contractual rights of owners." (*Id.* at ¶ 8 (citing *Cienega X*, 503 F.3d at 1266)). ELIHPA and LIHPRHA retained the incentives of the Section 221(d)(3) and 236 programs but created additional restrictions on the sale of the properties. (JSOF at ¶¶ 9−10). Congress enacted the final act in the relevant affordable housing regime in 1996, the Housing Opportunity Program Extension ("HOPE") Act. (*Id.* at ¶ 11); Pub. L. No. 104–120, 110 Stat. 834 (1996). The HOPE Act included an express provision allowing an owner to repay, but this provision had no bearing on the previously executed use or purchase agreements pursuant to LIHRPHA. (JSOF at ¶ 11 (citing *Anaheim Gardens (2018)*, 140 Fed. Cl. at 83); Pub. L. No. 104–120, 110 Stat. 834 (1996)).

The incentives for investors were significant. For example, because HUD insured the mortgages, owners could borrow up to ninety percent of the cost of the project, which was a higher leverage ratio than the seventy to eighty percent financing available for conventional housing. *Cienega X*, 503 F.3d at 1270–71; (*see also* Trial Tr. vol. 9, Malek, 1766:22–1767:1, Jan. 20, 2023, ECF No. 670). After borrowing ninety percent of the project's cost, the remaining ten percent was further reduced by the "Builder's and Sponsor's Profit and Risk Allowance"

[8] Ultimately, "approximately 200 similar cases" were filed alleging contractual and takings claims relating to the abrogation of the prepayment option and the loss of market rate income. Eric J. Buescher, *Home Robbery: Congress and HUD's Taking of Private Property in Affordable Housing*, 7 GEO. J.L. & PUB. POL'Y 571, 574 n.22 (Summer 2009) (citing Pet. for Writ of Cert. *Cienega Gardens v. United States*, 2008 WL 515859).

("BSPRA") which was a "noncash item" that HUD credited to the developer. *See Cienega X*, 503 F.3d at 1271; (Trial Tr. vol. 9, Malek, 1774:6–18, Jan. 20, 2023). Therefore, owners' actual upfront equity could be reduced significantly. Furthermore, the forty-year mortgages were longer than what was typically commercially available, which was an advantage for investors. (Trial Tr. vol. 5, 960:21–25, Wall, Jan. 13, 2023, ECF No. 653). In addition, the low upfront equity and leveraged structure of the mortgage meant that the property owners were eligible for significant tax benefits: "[a]t the time, the tax laws permitted accelerated depreciation for real estate projects over the real economic life of the property, allowing the general and limited partners to take large income tax deductions in the early years of the investment." *Cienega X*, 503 F.3d at 1271; (Trial Tr. vol. 9, Malek, 1746:3–1747:2, Jan. 20, 2023). Owners could claim this depreciation on the full value of the property, despite their relatively limited equity investment. (Trial Tr. vol. 9, Malek, 1741:5–23, Jan. 20, 2023).

While there were substantial benefits to joining the program, HUD also imposed restrictions on participating owners and developers that affected management decisions, annual returns, tenant income, and allowable rental rates. (JSOF at ¶ 4). For example, important management decisions like increasing rent had to be approved by HUD, and an owner's annual return was limited to six percent of their initial equity investment in the property. (*Id.*). During the construction phase of a Section 236 project, HUD also capped fees that could be paid to architects, engineers, or the builder-contractor. (Trial Tr. vol. 4, Wall, 712:8–13, Jan. 12, 2023, ECF No. 650). Property owners also had to pay for additional administrative expenses to comply with HUD's regulatory agreements, like annual income certifications, audit expenses, and oversight staffing expenses. (*Id.*, 766:14–19). These restrictions would lift when the mortgage on the property was paid off. (JSOF at ¶ 4 (citing *Cienega X*, 503 F.3d at 1271)).

A. The Preservation Statutes and the FWPs

The FWPs were investors in affordable housing projects during the ELIHPA and LIHPRHA statutory regimes. (*See* JSOF at ¶¶ 16–122). LIHPRHA effectively barred prepayment of the HUD-insured mortgages. (*Id.* at ¶ 9). Instead, property owners could choose whether to: (1) sell to a qualified purchaser; or (2) retain the property and sign a use agreement with HUD. (*Id.* at ¶¶ 9–10). Under the first option, the property could only be sold to new owners that met certain criteria, like status as a nonprofit that would preserve the rent restrictions. (*Id.* at ¶ 9). To complete the sale process, property owners would submit a Notice of Intent ("NOI") for approval to HUD indicating their intent to sell the property to a qualified purchaser. (*See e.g.*, *id.* at ¶¶ 92, 109). Once HUD approved the NOI and a qualified purchaser was secured, the owner and purchaser submitted a joint Plan of Action ("POA") to HUD detailing the specifics of the sale. (*See e.g.*, *id.* at ¶ 60).

The property owner and HUD would each hire an appraiser to value the property, and if the appraisal values were within five percent of each other, HUD would accept the owners' appraisal. (Trial Tr. vol. 1, Spieker, 205:16–21, Jan. 9, 2023, ECF No. 641). If the appraisals were not within five percent of each other, HUD and the property owner would negotiate a final sale price or hire a third appraiser to value the property. (*Id.*, 63:3–6; *see* Rule 63 Hr'g Tr. vol. 2, Riddiough, 245:16–22, July 9, 2024, ECF No. 779). When appraising the value of the properties, appraisers calculated the extension preservation value ("EPV"); the transfer preservation value

("TPV") was calculated during a reconciliation process of the appraisals. (*Id.*) EPV is "the fair market value of the [property] based on the highest and best use of the [property] as multifamily market-rate rental housing." (Trial Tr. vol. 8, East, 1560:14–16, Jan. 19, 2023, ECF No. 666). TPV is the value of "the highest and best use of the property . . . ." (*Id.*, 1560:17–19). In other words, TPV is determined based on "the cash flows associated, or the anticipated cash flows associated" with each property. (Rule 63 Hr'g Tr. vol. 2, Riddiough, at 245:7–11, 246:1–6, July 9, 2024). The appraised value was "the fair market value of the housing based on the highest and best use of the property." (Rule 63 Hr'g Tr. vol. 1, Trout, 146:8–13, July 8, 2024, ECF No. 777). The difference between EPV and TPV is that EPV is premised on the restriction that the property remains multifamily rental housing, and TPV is the unrestricted value of the property, potentially as something other than market-rate rental housing. (Trial Tr. vol. 8, East, 1560:20–25, Jan. 19, 2023).

If HUD approved the sale to a new owner, it would provide the new owner with financial assistance including HUD-insured loans and grants. (JSOF at ¶ 9). If HUD approved the sale but could not obtain financing, HUD allowed the owner to prepay the mortgage and exit the program with the property.[9] (*See e.g., id.* at ¶¶ 61–63). Four of the five FWPs in this case pursued the sale option.[10] Alternatively, owners could elect the second option under LIHPRHA, remaining in the program by signing a "use agreement" with HUD that maintained restrictions on the property, but provided additional incentives like HUD-insured equity takeout loans and increased revenues from the project through higher rents and increased payments for Section 8 housing,[11] among other assistance. (*Id.* at ¶ 10; Trial Tr. vol. 8, East, 1553:6–1555:16, Jan. 19, 2023).

1. <u>Buckman</u>

Buckman Gardens, L.P. ("Buckman Gardens Partnership") developed the Buckman Road Garden Apartments ("Buckman") located in Fairfax County, Virginia. (JSOF at ¶ 16). Buckman is an apartment complex consisting of 204 units. (*Id.*). Buckman was a Section 236 project, and the final endorsement date between Buckman and the United States was April 9, 1975. (*Id.* at ¶ 21). Buckman Gardens Partnership obtained an initial mortgage on the property for $3,045,700 and an additional $226,400 through a Deed of Trust note. (*Id.* at ¶ 23). These notes were consolidated and merged for a total of $3,272,100. (*Id.*). On April 12, 1993, Buckman Gardens Partnership submitted an initial Notice of Intent to HUD seeking incentives in exchange for their

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[9] This was not the case for any of the FWPs. HUD initially could not find the funds to complete the sale of Cienega Gardens, but eventually managed to. (JSOF at ¶¶ 62–63).

[10] Buckman, Cedar Gardens, Chauncy House, and Silverlake pursued the sale option under LIHPRHA. Rock Creek chose to stay in the program and signed a new use agreement with HUD. (JSOF at ¶¶ 39, 65, 81, 99, 121).

[11] Section 8 refers to a HUD voucher program to assist qualifying applicants to obtain affordable housing. *Section 8 housing*, USA.GOV, https://www.usa.gov/housing-voucher-section-8#:~:text=The%20Section%208%20housing%20choice,public%20housing%20agency%20(PHA) (last visited Jan. 17, 2025).

agreement to extend the affordability restrictions on their property (Option 2 under LIHPRHA). (*Id.* at ¶ 29). As part of the LIHPRHA process, Buckman Gardens Partnership hired an appraiser to value Buckman. (*Id.* at ¶¶ 30−31). This appraiser calculated the EPV and the TPV for Buckman at $6,610,000. (*Id.*). The HUD-appointed appraiser calculated the EPV for Buckman as $6,900,000. (JSOF at ¶ 32). The final negotiated EPV and TPV for Buckman was $6,608,000. (*Id.* at ¶ 33). Buckman Gardens Partnership ultimately decided to pursue a sale of the property to a non-profit purchaser (Option 1 under LIHPRHA) and Buckman was purchased by the Community Preservation and Development Corporation for $6,608,000. (*Id.* at ¶¶ 34, 38–39).

2. Cedar Gardens

Cedar Gardens Apartments ("Cedar Gardens"), located in Fresno, California, was developed by Cedar Gardens Associates ("CGA") in 1970 under the Section 221(d)(3) program. (*Id.* at ¶¶ 40−41). Cedar Gardens has a final endorsement date of April 22, 1971. (*Id.* at ¶ 46). CGA obtained a mortgage on the property for $1,882,800. (*Id.* at ¶ 47). Prior to the enactment of the Preservation Statutes, and pursuant to the terms of its mortgage and HUD regulations, CGA could have prepaid the mortgage any time after April 22, 1991. (*Id.* at ¶ 49). CGA expressed an interest to prepay on February 22, 1991, but HUD rejected their request. (*Id.* at ¶¶ 51−52). In October of 1992, CGA notified HUD of their intent to sell Cedar Gardens under LIHPRHA. (*Id.* at ¶ 53).

The CGA-appointed appraiser proposed an EPV and TPV of $4,089,550, and the HUD-appointed appraiser proposed an EPV and TPV of $2,930,000. (*Id.* at ¶¶ 54−55). The final negotiated TPV was $3,918,200. (*Id.* at ¶ 57). CGA submitted a second NOI to HUD on January 13, 1994, indicating that it intended to sell Cedar Gardens to a qualified purchaser. (*Id.* at ¶ 59). CGA then submitted a joint POA, which HUD approved. (*Id.* at ¶ 60). However, in June 1995 HUD informed CGA that LIHPRHA funds were not available for the approved sale and explained that if those funds were still unavailable by November 12, 1995, then CGA could prepay the mortgage. (*Id.* at ¶ 61). CGA notified HUD of their intent to prepay the mortgage, but HUD then informed CGA that Cedar Gardens was not located in a low-vacancy area and therefore CGA would have to conform to other requirements in order to be eligible for prepayment. (*Id.* at ¶¶ 62−63). Ultimately, CGA sold Cedar Gardens to Asociacion Campesina Lazaro Cardenas, Inc., for $3,980,200. (*Id.* at ¶ 65).

3. Chauncy House

The Chauncy House Company ("CHC") developed Chauncy House in 1973 as a Section 236 project. (JSOF at ¶¶ 66−67). Chauncy House is located in Boston, Massachusetts. (*Id.*) The final endorsement date between CHC and the United States was October 14, 1975. (*Id.* at ¶ 70). CHC obtained a mortgage on the property for $2,002,400. (*Id.*). Prior to the enactment of the Preservation Statutes, and pursuant to the terms of its mortgage and HUD regulations, CHC could have prepaid the mortgage any time after October 14, 1995. (*Id.* at ¶ 71). On October 19, 1993, CHC submitted a NOI to HUD seeking incentives in exchange for extending the affordability restrictions on the property. (*Id.* at ¶ 73). However, CHC ultimately decided to pursue a sale of the property under LIHPRHA. (*Id.* at ¶ 74). The Chauncy-appointed appraiser valued the property at $3,550,000, and the HUD-appointed appraiser gave Chauncy an EPV of

$3,020,000 on April 1, 1994. (*Id.* at ¶ 75). Chauncy was appraised again on January 15, 1997, and received an EPV of $5,150,000. (*Id.* at ¶ 80). CHC ultimately sold Chauncy to Chauncy House Community Corporation for $3,550,000. (*Id.* at ¶ 81).

In February 1974, Chauncy issued a prospectus or Private Placement Memorandum ("PPM") that listed "economic incentives for investment in the Partnership" that included: (1) an annual cash distribution if funds were available, (2) the ability to access net proceeds from a refinancing, sale, or other distribution of partnership assets, and (3) federal tax benefits. (JSOF at ¶¶ 68, 69; *see also* Trial Tr. vol. 3, Reagan, 509:10–510:1, Jan. 11, 2023, ECF No. 645). The prospectus did not present a plan for conversion to market-rate housing at the twenty-year date. (*See* Trial Tr. vol. 3, Reagan, 506:19–507:10, Jan. 11, 2023 (citing CHC's PPM, JX 65)). The investor limited partners were to "receive 95% of the profits and losses and cash distributions from the normal operations of [CHC]" and the general partners and limited partners were to "receive the remaining 5% of such profits and losses and cash distributions." (Trial Tr. vol. 3, Reagan, 506:19–507:10, Jan. 11, 2023 (citing CHC's PPM)).

4. <u>Rock Creek</u>

Rock Creek Terrace Limited Partnership ("Rock Creek Partnership") developed Rock Creek Terrace ("Rock Creek") as a Section 236 property. (JSOF at ¶¶ 82, 86). Rock Creek is located in Montgomery County, Maryland. (*Id.* at ¶ 83). The final endorsement date between Rock Creek Partnership and the United States was December 29, 1972. (*Id.* at ¶ 86). Rock Creek Partnership obtained a $9,388,500 mortgage on the property. (*Id.*). Prior to the enactment of the Preservation Statutes, and pursuant to the terms of its mortgage and HUD regulations, Rock Creek Partnership could have prepaid the mortgage any time after December 29, 1992, without HUD consent. (*Id.* at ¶ 89). In August 1988, Rock Creek Partnership renewed a Section 8 Housing Assistance Payment ("HAP") contract for 105 of the property's 526 units until July 1993, then renewed the HAP for an additional five years. (*Id.* at ¶¶ 90−91). In June of 1992, Rock Creek Partnership submitted a NOI to HUD seeking incentives in exchange for extending the affordability restrictions on the property. (*Id.* at ¶ 92). The Rock Creek Partnership-appointed appraiser proposed an EPV and TPV of $20,275,000 in August 1992, while the HUD-appointed appraiser assessed an EPV of $18,000,000. (*Id.* at ¶¶ 93–94). On February 11, 1994, HUD memorialized the property's preservation value at an EPV and TPV of $20,270,000. (*Id.* at ¶ 95). Rock Creek Partnership filed a second NOI indicating an intent to sell the property; it later rescinded the proposal and submitted a POA to retain the property and seek an equity takeout loan pursuant to Section 241. (*Id.* at ¶¶ 96−97). In January 1995, HUD approved the POA, and Rock Creek Partnership executed a third Deed of Trust note reflecting a Section 241(f) loan in the amount of $9,416,500. (*Id.* at ¶¶ 98−99). Rock Creek's use agreement was filed on May 1, 1995, enabling the project to receive LIHPRHA incentives. (*Id.* at ¶ 99).

5. <u>Silverlake</u>

Silverlake Village Apartments ("Silverlake") is located in Los Angeles, California and was originally developed by Silverlake Village, L.P. (JSOF at ¶ 100). The final endorsement date between Silverlake Village, L.P. and the United States was September 13, 1973. (*Id.*). Silverlake Village, L.P. obtained a mortgage on the property for $1,210,000. (*Id.*). Silverlake Village, L.P.

sold Silverlake to 3740 Silverlake Village, L.P. ("3740 Silverlake") on December 1, 1986, for $1,700,000. (*Id.* at ¶¶ 106−107). 3740 Silverlake signed a regulatory agreement with HUD under Section 236 on the date of the sale. (*Id.* at ¶ 108). On May 8, 1992, 3740 Silverlake submitted a NOI to HUD indicating its intent to sell the property. The 3740 Silverlake-appointed appraiser proposed both an EPV and TPV of $5,770,000, while the HUD-appointed appraiser identified a stabilized market value of $6,000,000 and an EPV of $5,575,000. (*Id.* at ¶¶ 112−113). HUD agreed to an EPV and TPV of $5,745,000. (*Id.* at ¶ 114). HUD initially struggled to find funding to complete the sale, so 3740 Silverlake sent a letter to Fannie Mae indicating intent to prepay the mortgage. (*Id.* at ¶¶ 118−19). Fannie Mae responded that "the request to pay the mortgage in full is <u>not approved</u> . . . ." (*Id.* at ¶ 119) (emphasis in original). 3740 Silverlake ultimately executed a grant deed on October 19, 1995, which conveyed Silverlake to Metro West Heritage Housing, Inc. ("Metro West"). (*Id.* at ¶ 120). Metro West eventually purchased Silverlake on or about November 1, 1995, for $5,770,030. (*Id.* at ¶ 121).

B. Calculating Economic Impact

As of the trial date, four of the five FWPs sold their properties, and one retained ownership. (Trial Tr. vol. 7, Trout, 1317:3–6, Jan. 18, 2023, ECF No. 658). The parties used experts to calculate the alleged economic impact of the Preservation Statutes on their properties. FWPs initial expert was Dr. William W. Wade, an economist with a Ph.D. in resource and applied economics. (*See* Wade Dep. 18:3–21:4, JX 201). Dr. Wade provided an analysis of the economic impact of the Preservation Statutes on the FWPs' properties and FWPs' alleged investment-backed expectations. (Wade Dep. 51:1–52:1). Dr. Wade died in May of 2020; FWPs subsequently engaged Dr. Robert Trout ("Dr. Trout") as their expert. (Trial Tr. vol. 6, Trout, 1117:25–1119:20, Jan. 17, 2023, ECF No. 655). Dr. Trout has experience as an economist and chartered financial analyst. (Trial Tr. vol. 6, Trout, 1089:1–1092:10, Jan. 17, 2023). Dr. Trout agreed with the overall approach Dr. Wade employed and adopted Dr. Wade's opinions as his own. (*See id.*, 1111:23–1112:22, 1119:11–20, 1121:4–23).

The degree of Dr. Trout's involvement in Dr. Wade's work on behalf of the FWPs is somewhat muddied. Beginning in 2013, Dr. Trout consulted with his former colleague and reviewed Dr. Wade's final report and the reports of assorted government witnesses. (Trial Tr. vol. 6, Trout, 1109:25–1110:12, Jan. 17, 2023). Most recently, Dr. Trout described a significant level of involvement in Dr. Wade's analysis of FWPs' damages; according to Dr. Trout, they jointly discussed methods to calculate FWPs' damages, that Dr. Wade sent him "a lot" of materials and two, possibly three, iterations of a draft initial report, the United States' reports, and rebuttal reports. (Rule 63 Hr'g Tr. vol. 1, Trout, 12:4–13:14, July 8, 2024; Trial Tr. vol. 6, Trout, 1112:1–15; 1118:5–11, Jan. 17, 2023). Dr. Trout's estimation of his involvement in Dr. Wade's preparations starkly contrasts Dr. Wade's proffer regarding the same issue. When asked about others that Dr. Wade may have consulted in developing his report, Dr. Wade identified one of his employees but *did not* identify Dr. Trout. (Wade Dep. 15:17–20). The Court cannot resolve this conflict regarding the relationship between Dr. Trout and Dr. Wade for the years 2013–2017.[12]

[12] In 2020, Dr. Wade contacted Dr. Trout to garner assistance in preparing for trial. At that point, however, Dr. Trout was unsure if he had previously reviewed Dr. Wade's report. (Trial Tr. vol. 6, Trout, 1118:15–23, Jan. 17, 2023, ECF No. 655). Again, this inconsistency is troubling.

Crucially, Dr. Trout did not offer his own opinions regarding losses suffered by FWPs. (Trial Tr. vol. 6, Counsel, 1115:6–1117:20, Jan. 17, 2023; Trial Tr. vol. 7, Trout, 1306:21–23, 1307:7–9, Jan. 18, 2023). Instead, Dr. Trout adopted Dr. Wade's opinions entirely, and his testimony was limited to his review of Dr. Wade's methodology and opinions. (Rule 63 Hr'g Tr. vol. 1, Trout, 11:16–16:14, July 8, 2024; *see* Trial Tr. vol. 7, Trout, 1307:7–9, 1307:25–1308:3, 1343:1–4, Jan. 18, 2023). Coupled with the unique procedural posture of these cases described above, the Court finds itself in an odd position—assessing the credibility of a non-testifying expert as well as the credibility of a testifying, but largely non-opinion offering, expert. Independent of Dr. Wade's opinions, Dr. Trout did perform a sensitivity analysis regarding Dr. Wade's conclusions. (Trial Tr. vol. 6, Trout, 1217:18–1219:11, Jan. 17, 2023). This analysis involved changing certain inputs in Dr. Wade's formulas that generated what Dr. Trout characterized as "severe economic injury" though the sums generated varied by "a few million dollars." *(Id.*, 1219:1–11). In one instance, the difference between Dr. Wade's computations and Dr. Trout's, using different inputs, resulted in $2 million less for a single FWP. (Trial Tr. vol. 7, Trout, 1349:3–1354:13, Jan. 18, 2023). The import of this "sensitivity analysis" is unclear; nothing within Dr. Trout's manipulation of Dr. Wade's inputs suggests that Dr. Wade's conclusions are worthy of greater credence. Dr. Trout further opined that Dr. Wade's calculations were "reasonable assessments of the economic damages sustained by the FWPs." (*Id.*, 1284:16–17). Though adopting Dr. Wade's report, Dr. Trout's review calculated "adjustments" to Dr. Wade's damages conclusions based upon his own sensitivity analysis. (*Id.*, 1307:10–23).

The United States' expert was Dr. Timothy Riddiough ("Dr. Riddiough"), a professor and former department chair in the Department of Real Estate and Urban Land Economics at the University of Wisconsin-Madison. (Trial Tr. vol. 11, Riddiough, 2251:22–2253:18, Jan. 24, 2023, ECF No. 674). Dr. Riddiough has worked "in the field of real estate and urban economics" for over thirty years. (*Id.*, 2256:20–23).

1. <u>FWPs' Calculation of Economic Impact</u>

Dr. Wade calculated the economic impact of the Preservation Statutes on the FWPs' properties between 92% and (more than) 100%.[13] (Rule 63 Hr'g Tr. vol. 1, Trout, 204:16–205:4, July 8, 2024). In dollars, FWPs assert this economic impact is: $4,653,695 for Cedar Gardens, $8,014,386 for Rock Creek, $5,724,904 for Silverlake, $9,814,429 for Buckman, and $5,106,883 for Chauncy House. (*Id.*, 28:7–11, 37:3–38:1).[14] To measure the economic impact of the Preservation Statutes on the FWPs, "Dr. Wade . . . 'compar[ed] the lost net income due to the restriction . . . with the total net income without the restriction' . . . by dividing the lost net income by the net present value of the future rental income." *Anaheim Gardens*, *L.P.*, 953 F.3d at

[13] Specifically, Dr. Wade calculated the percentages of economic impact for the FWPs' properties as: 98% for Buckman; greater than 100% for Silverlake; 93% for Chauncy House; greater than 100% for Cedar Gardens; and greater than 100% for Rock Creek. (Trial Tr. vol. 6, Trout, 1191:9–11, Jan. 17, 2023; *see* Trial Tr. vol. 14, Trout, 2793:23–2795:11, Jan. 30, 2023, ECF No. 695).

[14] Cedar Gardens sold for $3,980,200, (JSOF at ¶ 65), Silverlake sold for $5,770,030, (*id.* at ¶ 121), Buckman sold for $6,608,000, (*id.* at ¶¶ 34, 39), and Chauncy House sold for $3,550,000, (*id.* at ¶ 81). HUD designated Rock Creek's EPV and TPV at $20,270,000. (*Id.* at ¶ 95).

1354 (citing *Cienega X*, 503 F.3d at 1282); (*see* Trial Tr. vol. 6, Trout, 1170:23–1171:19, Jan. 17, 2023; Rule 63 Hr'g Tr. vol. 1, Trout, 116:2–10, July 8, 2024). In other words, "[t]o calculate the percentage reduction in net present value, Dr. Wade divided the calculated economic loss by the net present value of the lost market conversion opportunity." *Anaheim Gardens*, *L.P.*, 953 F.3d at 1352. FWPs define present value as "the value of some stream of income in the future discounted to the present." (Rule 63 Hr'g Tr. vol. 1, Trout, 38:16–19, July 8, 2024). Dr. Wade used a discounted cash flow analysis in his methodology. *Anaheim Gardens*, *L.P.*, 953 F.3d at 1354; (Trial Tr. vol. 6, Trout, 1137:15–28, Jan. 17, 2023). FWPs presented the following equation as one of Dr. Wade's formulas to calculate economic loss:

Economic Loss = PV [(total net income without the restriction over the entire useful life of the property) less (actual net income with the restriction)]

Where: PV = Discounted to present value at the date the restriction was imposed.

(Rule 63 Hr'g Tr. vol. 1, Trout, 38:8–12, July 8, 2024; PDM DD at 4; Trial Tr. vol. 14, Trout, 2761:17–2762:10, Jan. 30, 2023, ECF No. 695).

Dr. Trout explained that this formula is "an estimate of what happened . . . without the restriction, and you compare it with what they actually got." (Trial Tr. vol. 14, Trout, 2762:1–10, Jan. 30, 2023). In this formula, PV(total net income without the restriction over the entire useful life of the property), which FWPs also call "PV market conversion," is the present value of the future stream of income (discounted back to the prepayment date) FWPs would have received for twenty years after prepaying their mortgages and exiting the 221(d)(3) or 236 program. (*See* Trial Tr. vol. 6, Trout, 1160:12–1161:16, Jan. 17, 2023). "PV(actual net income with the restriction)," which the FWPs also call "PV(actual outcome)," stands for the present value of the money the respective FWPs received under LIHPRHA. (*Id.*, 1161:5–16). In calculating the PV(total net income without restriction over the useful life of the property), Dr. Wade "estimated what the cash flows would be during the next [twenty] years, based on rental rates in each of the property's areas, and then subtracted out applicable costs. And then [he] took those future net income values and discounted them to the prepayment date." (Trial Tr. vol. 14, Trout, 2763:10–18, Jan. 30, 2023). For the second half of the formula, for four out of the five properties, "[Dr. Wade] looked at the value of the property when it was sold a couple of years after the prepayment date, typically, and then discounted that back to the prepayment date. (*Id.*, 2763:19–2764:2).

FWPs also use the formula Economic Loss = NPV(expected net operating income from conversion to market less TPE) minus NPV(actual cash distributions of outcome less TPE). (Rule 63 Hr'g Tr. vol. 1, Trout, 42:13–43:5, July 8, 2024; *see* DDM DD at 32; *see also* Trial Tr. vol. 6, Trout, 1160:12–1164:7). In this second formula, TPE stands for "Transfer Preservation Equity" and refers to the estimate of the owner's equity as of the appraisal date of their

properties. (Trial Tr. vol. 6, Trout, 1162:9–1163:3, Jan. 17, 2023).[15] Net Present Value ("NPV") is described in more detail below.

2. <u>FWPs' Calculation of Net Present Value of Future Lost Income</u>

The first step in Dr. Wade's methodology was to determine an event date, or the prepayment eligibility date for each FWP.[16] (Trial Tr. vol. 6, Trout, 1122:1–1123:25, Jan. 17, 2023). Dr. Wade then used a "buildup process" to form his opinion about the FWPs' economic losses. (Rule 63 Hr'g Tr. vol. 1, Trout, 13:25–14:8, 42:1–8, July 8, 2024). Dr. Trout testified that he "looked at some of the background data" provided by Dr. Wade and "traced through the sort of [ten] steps that he used to get to a final . . . loss number." (*Id.*, 15:12–16). Dr. Wade's "buildup process" began with a series of charts that showed "basic information" and he then incorporated those inputs into charts for each property. (*Id.*, 15:19–16:4; Trial Tr. vol. 6, Trout, 1137:22–1151:18, Jan. 17, 2023; PDM DD at 5).

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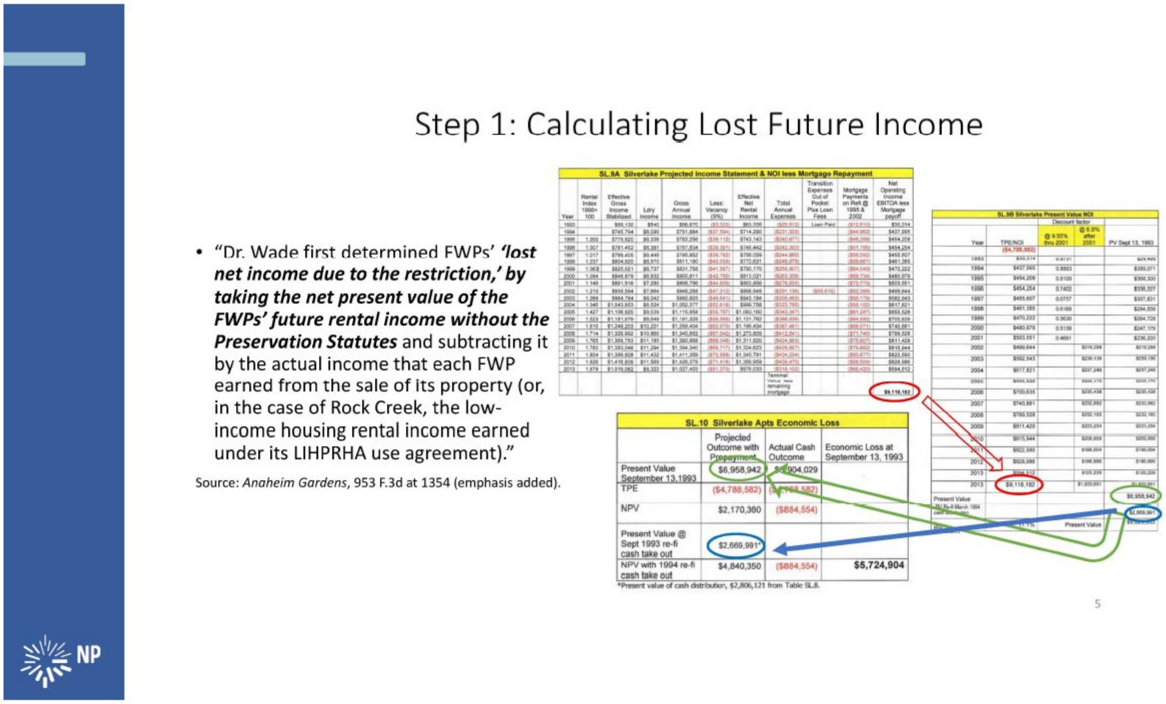
[15] When asked about the differences between the terms "[Percent] Reduction [Equals] NPV Projected Outcome" versus "Projected Outcome with Prepayment" and "NPV Market Conversion," Dr. Trout stated that the terms were "all the same." (Rule 63 Hearing Tr. vol. 1, Trout, 131:17–132:12, July 8, 2024, ECF No. 777 (The Court: "So why use different terms? Again, when you've got a la[y] [sic] person like me, who's supposed to make sense of this, how am I supposed to know that those things mean the same within the field of economics?" Dr. Trout: "I don't think there's sort of a unanimity of agreement of economics that those terms mean the same thing, but they do with respect to this case as they use it. And [Dr. Wade] likes to write things and he's a bit wordy, so he's using different ways to express the same thing.")). In other words, the economic terminology used by Dr. Wade and Dr. Trout is not derived from industry or academic norms but constructed for use during this litigation.

[16] Dr. Trout later stated that the first step in Dr. Wade's economic loss analysis was to calculate the net present value ("NPV") of the properties. (Rule 63 Hearing Tr. vol. 1, Trout, 120:6–11, July 8, 2024).



(PDM DD at 5).

These 9A charts represent Dr. Wade's opinion (testified to by Dr. Trout) as to the net operating income, less mortgage payments, that FWPs would have earned if they had prepaid their mortgages and converted their properties to market-rate housing. (Trial Tr. vol. 6, Trout, 1171:11–1190:20, Jan. 17, 2023). Dr. Wade calculated twenty years of lost market income because it was "the remaining life of the original agreement between HUD, the lender and the property owner." (Rule 63 Hr'g Tr. vol. 1, Trout, 40:9–13, July 8, 2024). Dr. Wade then discounted the net operating income "to present value as of the [FWPs'] prepayment date," which created the number Dr. Wade called the "net present value of the projected outcome with prepayment . . ." or his calculation of economic loss. (Trial Tr. vol 6, Trout, 1141:6–13, 1223:18–21, Jan. 17, 2023; *see* PDM DD at 5). Dr. Wade used a discount rate of 9.55 percent for the first 10 years after prepayment eligibility and then a rate of 6.9 percent for the following 10 years. (Wade Dep. 157:6–11). Dr. Wade then added in the present value of a cash distribution from a refinance he assumed would occur, which created a total NPV number for each property as of the respective prepayment dates.[17] (*See* Trial Tr. vol. 6, Trout, 1181:11–21, 1202:22–1205:3, Jan 17, 2023; Wade Dep. 130:15–131:2).

Prior to trial, the Federal Circuit described Dr. Wade's NPV as "representing 'present value' of future cash flows subtracted by 'equity.'" *Anaheim Gardens*, *L.P.*, 953 F.3d at 1355.

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[17] The "total NPV as of the respective prepayment date" for each property was: $14,040,246 for Buckman, $6,958,942 for Silverlake, $4,081,400 for Cedar Gardens, $6,267,332 for Chauncy House, and $5,026,524 for Rock Creek. (Trial Tr. vol. 6, Trout, 1149, 1194–1196, 1197:1–1199:1–8, 1192:5–25–1194:1:16, Jan. 17, 2023; Trial Tr. vol. 14, Trout, 2770:9–16, Jan. 30, 2023; *see* PDM DD at 5).

NPV is "the net present value of the cash flows that the owners would have received had they been able to" prepay their mortgages and convert their properties to market-based rentals. (Rule 63 Hr'g Tr. vol. 1, Trout, 120:4–8, July 8, 2024). In other words, the NPV measured the cash flows FWPs would have received in an unrestricted world had the Preservation Statutes not existed. (*Id.*, 120:4–11). FWPs also explain NPV as "the PV future cash flows less the TPE at the prepayment eligibility date." (Trial Tr. vol. 6, Trout, 1161:19–1162:6, Jan. 17, 2023).

In the Rule 63 Hearing, Dr. Trout attempted to explain Dr. Wade's calculations of twenty years of lost rental income using charts pertaining to Silverlake as an example. (Rule 63 Hr'g Tr. vol. 1, Trout, 75:1–100:13, July 8, 2024 (citing PDM DD at 5)). Dr. Wade combined numbers from different sources to estimate the "Rental Index 1995 = 100" column. (*Id.*, 47:18–23). Dr. Wade pulled the first three years of "effective income stabilized" from the appraisal reports. (*Id.*, 49:22–25). "Each value for effective gross income stabilized, as you move through time, is the product of the starting point effective gross income $775,920, multiplied by the rental index for that particular year." (*Id.*, 52:15–23). Dr. Wade also incorporated "laundry income" in his calculations of lost market income, which come from the LIHPRHA appraisal reports from 1993–1995. (*Id.*, 53:13–23). Dr. Wade took a percentage of the ratio of laundry income in 1995, which was $6,336, and divided it by $775,920, which gave him the laundry income as a percentage of effective gross income stabilized, which is .8%. (*Id.*). He then multiplied .8% by the effective gross income for 1996–2013. (*Id.*). Dr. Wade also subtracted a consistent five percent vacancy rate, which was in the HUD appraisal reports as an industry standard. (*Id.*, 54:13–25). One of these charts was SL.9B (Silverlake Present Value Net Operating Income) which was missing a column of numbers called the "interest factor."

> The Court: So tell me how Dr. Wade arrived at the number of $219,258, and why does . . . the number in the third column always exactly match the number in the fourth column?
>
> Dr. Trout: So for 2002, that interest factor, which is in his computer and it just didn't print out. It's either in a hidden column or it's over to the right somewhere, but that number is 0.439 and would be the interest factor for that year for 6.9 percent discount rate.

(Rule 63 Hr'g Tr. vol. 1, 88:21–94:25, July 8, 2024).

Dr. Trout could not clearly explain the interest factor or how the Court could verify the total numbers presented in Dr. Wade's lost income analysis. (*Id.*, 92:1–2 (Dr. Trout: "It's 0.4392 or something."); *id.*, 92:15–20 (Dr. Trout: "In that Excel file, in that row for 2002 . . . there is a value of 0.439, it just doesn't show, and [Dr. Wade] might have hidden it for some strange reason or it might be over a couple of columns, but it's there, because that 0.439 is in the program itself . . ."); *id.*, 94:16–18 (The Court: "I'm not sure how we're getting to these numbers and there being

no explanation of hidden columns.”)).[18] The Court was unable to reproduce the outcomes offered by Dr. Trout as to the NPVs of the lost rental incomes.

3. FWPs’ Calculation of Actual Outcomes Under LIHPRHA

Next, to determine what the FWPs actually received through the LIHPRHA process, Dr. Wade used FWPs’ appraisals. (Wade Dep. 41:7–17). Dr. Wade subtracted what he called Transfer Preservation Equity (“TPE”) discounted to the present value as of the properties’ prepayment date, from the appraised value of the property. (*Id.*, 53:13–15, 54:12–55:2; Trial Tr. vol. 6, Trout, 1150:14–23, 1162:9–1163:9, Jan. 17, 2023; PDM DD at 6). Mr. Levy defined TPE as “the amount [of money] that [the purchasers] would put into the purchase agreement.” (Trial Tr. vol. 2, Levy, 324:25–325:1, Jan. 10, 2023, ECF No. 643). Dr. Trout explained TPE as “the owners’ equity in the property at prepayment date, and it’s a term that’s used in the LIHPRHA process to provide an estimate of the owners’ equity as of the date of the appraisal.” (Trial Tr. vol. 6, Trout, 1162:9–16, Jan. 17, 2023). Dr. Trout testified that the actual amount received by each FWP was: $231,000 for Buckman, (*id.*, 1189:15), $3,904,029 for Silverlake, (*id.*, 1200:2–6), $2,321,412 for Chauncy House, (*id.*, 1195:11–15), and $2,987,862 for Rock Creek, (*see id.*, 1198:15–1199:8).[19] FWPs rely on Dr. Wade’s deposition for the actual amount received by Cedar Gardens, which was $572,295. (Wade Dep. 58:15; *see* Rule 63 Hr’g Tr. vol. 1, FWPs’ Counsel, 34:22–35:5, July 8, 2024). For multiple FWPs, Dr. Wade calculated that the TPE was greater than the actual cash outcome received through the LIHPRHA process. (Trial Tr. vol. 6, Trout, 1198:8–1199:1, Jan. 17, 2023).

Finally, Dr. Wade calculated “the percentage reduction of NPV” for each of the FWPs properties. (*See* Wade Dep. 59:8–60:7, 61:2–20, 62:16–22, 63:8–20, 65:13–66:4, 66:19–67:6).

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[18] Dr. Trout seems to have relied entirely on Dr. Wade’s computations and charts. (Trial Tr. vol. 6, Trout, 1112:19–22, Jan. 17, 2023 (Dr. Trout: “I didn't prepare any tables. I probably talked to [Dr. Wade] about some of the calculations in some of his exhibits and tables, but I can't say for certain any particular ones.”)). As noted above, these unique facts create the unenviable situation wherein the Court is asked to determine the believability of an expert based predominantly on the testimony of a separate expert retained by the same parties, all-the-while deprived of the ability to hear an explanation for deficiencies within those computations.

[19] In their briefing, FWPs assert that “the actual amounts received by FWPs, after subtraction of the TPE for each FWP, discounted to PV as of the prepayment date are as follows: $572,295 for Cedar Gardens, $2,987,862 for Rock Creek Terrace, $884,554 for Silverlake, $231,291 for Buckman and $446,267 for Chauncy House.” (FWPs’ Post-Trial Br. at 18, ECF No. 753). The Court cannot find a record of the $446,267 amount for Chauncy House in testimony. (*See* Rule 63 Hr’g Tr. vol. 1, FWPs’ Counsel, 36:5–12, July 8, 2024 (FWPs’ counsel noting the United States’ contention that this number is not mentioned in the record)). As far as the Court can tell, Plaintiffs took their numbers directly from Dr. Wade’s expert report, but Dr. Trout rounded Buckman’s number down and misstated Silverlake’s.

He agreed that "the percentage reduction of NPV represent[ed] [his] conclusion regarding the interference with distinct investment-backed expectations." (*Id.*, 61:13–17).

C. *Defendant's Calculation of Economic Impact*

Dr. Riddiough determined that the economic impacts on the FWPs from the Preservation Statutes ranged from 5.9% to 27.4% and correlated just compensation ranged from $744,795 to $7,941,811. (Trial Tr. vol. 11, Riddiough, 2296:24–2297:9, Jan. 24, 2023; Rule 63 Hr'g Tr. vol. 2, Riddiough, 342:15–18, July 9, 2024). Dr. Riddiough calculated economic impact in accordance with the change-in-value approach endorsed by the Federal Circuit in *Cienega X*. 503 F.3d at 1282; (Rule 63 Hr'g Tr. vol. 2, Riddiough, 344:16–24, July 9, 2024). In his calculation, "economic impact is expressed as a percentage or a ratio" comparing the change in value caused by the regulation restrictions with the property value as a whole. (Trial Tr. vol. 11, Riddiough, 2294:1–2295:2, Jan. 24, 2023). Dr. Riddiough's economic impact formula is:

$$EconImpact_{RIDD} = \frac{PropVal_{ex\ ante}^{unrestricted} - PropVal_{ex\ ante}^{restricted}}{PropVal_{ex\ ante}^{unrestricted}}$$

(*Id.*, 2293:17–2295:16) (discussing DDM D at 3)).

In this formula, the "unrestricted" value reflects the FWPs' property values as a whole with no Preservation Statutes, and the "restricted" value reflects the FWPs' property values as a whole subject to the Preservation Statutes, including the offsetting benefits available under those statutes. (Trial Tr. vol. 11, Riddiough, 2294:9–19 (discussing DDM D at 3), 2331:4–2332:16, Jan. 24, 2023; *see* Rule 63 Hr'g Tr. vol. 2, Riddiough, 243:16–244:22, July 9, 2024). The numerator is the difference between the unrestricted value of the property as a whole, and the restricted value of the property as a whole. (Trial Tr. vol. 11, Riddiough, 2293:20–2295:16, Jan. 24, 2023; *see* Trial Tr. vol. 12, Riddiough, 2428:4–12, Jan. 25, 2023, ECF No. 691). Dr. Riddiough divided the numerator by the unrestricted property value as a whole. (Trial Tr. vol. 11, Riddiough, 2294:20–2295:2, Jan 24, 2023) (discussing DDM D at 3); Trial Tr. vol. 12, Riddiough, 2428:10–12, Jan. 25, 2023). Each of the "PropVal" inputs in Dr. Riddiough's equation reflects the property value as a whole, meaning the "equity value plus debt value" of the property. (Trial Tr. vol. 11, Riddiough, 2314:15–17, 2325:2–4, Jan. 24, 2023). In calculating economic impact, Dr. Riddiough used *ex ante* data, which is information that was known or knowable as of the prepayment eligibility date for each property. (*Id.*, 2286:25–2287:15, 2304:4–6, 2330:7–17; *see e.g.,* Trial Tr. vol. 12, Riddiough, 2561:7–13, Jan. 25, 2023).

1. Defendant's Calculation of Unrestricted Property Value

Dr. Riddiough used two inputs to calculate the unrestricted *ex ante* property values as of the prepayment eligibility dates for each property. (Trial Tr. vol. 11, Riddiough, 2326:8–25, Jan. 24, 2023). The first input was the appraised values for each property based on the assumption that FWPs would immediately convert to market-rate housing on their prepayment eligibility date, and the second was the release of reserves. (*See id.*). For the first input, Dr. Riddiough relied on appraisals conducted by Ms. Konikoff, who determined the value of each FWPs'

property as of the prepayment eligibility date based on the assumption that the property could be converted immediately to market-rate housing. (*Id.*, 2326:15–17; Trial Tr. vol. 10, Konikoff, 1970:25–1971:6, Jan. 23, 2023, ECF No. 672). Ms. Konikoff used the prepayment eligibility date as the date of value for each of the properties. (Trial Tr. vol. 10, Konikoff, 2084:5–14, Jan. 23, 2023; Trial Tr. vol. 11, Riddiough, 2326:8–18, Jan. 24, 2023). Ms. Konikoff found the following values:

Property	Date of Value	Value	Expected Sale Date	Interim Income Between Date of Value and Expected Sale Date
Buckman	April 9, 1995	$7,300,000	June 9, 1996	$345,836
Cedar Gardens	April 22, 1991	$3,650,000	July 28, 1995	$717,632
Chauncy House	Oct. 14, 1995	$3,670,000	Dec. 14, 1996	$383,707
Rock Creek	Dec. 29, 1992	$22,450,000	July 8, 1995	$2,510,431
Silverlake	Sept. 13, 1993	$5,700,000	July 8, 1995	$340,722

(Trial Tr. vol. 10, Konikoff, 2012:1–2013:4, Jan. 23, 2023 (discussing DDM C at 22)).

For the second input, the properties accumulated reserves that owners were restricted from accessing while operating the properties as affordable housing. (Trial Tr. vol. 11, Riddiough, 2328:17–2329:10, Jan. 24, 2023 (discussing DDM D at 10)). Dr. Riddiough consulted the FWPs' year-end financial statements to determine the balance of restricted reserves that would be accessible after converting the properties to market-rate housing. (*Id.*, 2329:11–17). He then calculated the unrestricted property values by "add[ing] one to the other" to "get a total value." (*Id.*, 2329:24–2330:6). Dr. Riddiough's unrestricted property values are:

Property	Unrestricted Property Value
Buckman	$7,707,535
Cedar Gardens	$3,835,368
Chauncy House	$4,305,406
Rock Creek	$22,767,308
Silverlake	$5,958,402

(*Id.*, 2330:18–2331:2) (discussing DDM D at 10)). Dr. Riddiough then inserted these values in both the numerator and denominator of his equation. (*Id.*, 2326:8–18).

2. Defendant's Calculation of Restricted Property Value

To determine the restricted property value, Dr. Riddiough applied the discount rate for each property to the LIHPRHA sales proceeds, restricted reserves, and income from operating the property as an affordable property prior to sale. (Trial Tr. vol. 11, Riddiough, 2357:9–16, Jan. 24, 2023). Dr. Riddiough calculated the following restricted *ex ante* values for the FWPs' properties:

Property	Restricted *Ex Ante* Property Value
Buckman	$6,388,479
Cedar Gardens	$2,784,072
Chauncy House	$4,050,461
Rock Creek	$17,261,470
Silverlake	$5,177,075

(*Id.*)

Dr. Riddiough included three components in his calculation of restricted property value: (1) the expected proceeds from the sales option under LIHPRHA; (2) "the release of the restricted reserves coming as of the sale date"; and (3) "the expected income received running the properties as affordable over [the] interval from the eligibility date through the sales date." (Trial Tr. vol. 11, Riddiough, 2331:4–2332:16, Jan. 24, 2023; Rule 63 Hr'g Tr. vol. 2, Riddiough, 243:11–244:23, July 9, 2024). These inputs were calculated using *ex ante* information. (Trial Tr. vol. 11, Riddiough, 2305:21–2306:3, 2307:16–20, 2331:4–2332:16, Jan. 24, 2023). Dr. Riddiough then discounted each input back to the prepayment eligibility date (see below for a discussion of Dr. Riddiough's discount rates). (*Id.*, 2332:2–16). The largest element of the restricted property value was the proceeds from the expected sale under LIHPRHA. (*See generally, id.*, 2331:14–2332:16). All FWPs except Rock Creek took the sale option under LIHPRHA, but Dr. Riddiough "analyzed Rock Creek under an assumption . . . that it was a sale option." (*Id.*, 2331:14–21).

The anticipated sale amounts for Chauncy House, Buckman, and Silverlake were based on the agreed-upon transfer preservation value as of the prepayment eligibility date. (*Id.*, 2332:17–2333:6). Cedar Gardens had a prepayment eligibility date in 1991, which predated the completion of the transfer preservation process regulations, so the LIHPRHA appraisals were not yet available. (*Id.*, 2334:8–20). Therefore, Dr. Riddiough used "Ms. Konikoff's estimate of the conversion value." (*Id.*, 2334:8–2335:10). Ms. Konikoff assumed "that the property is converted to market rate." (*Id.*). The anticipated sale amount for Rock Creek was determined using the owner's LIHPRHA appraisal, though Rock Creek ultimately entered into a use agreement instead of selling the property. (*Id.*, 2333:7–2334:7).

Dr. Riddiough also included an amount lost by each FWP due to the length of time required to complete the LIHPRHA sale process, which Dr. Riddiough estimated at thirty-eight months. (*Id.*, 2336:16–24, 2338:6–2339:10 (discussing DDM D at 13)). Additionally, on top of that thirty-eight months for most FWP properties, Dr. Riddiough estimated that the earliest date each property owner could have submitted a NOI as of May 8, 1992, the date that the interim LIHPRHA rule took effect. (*Id.*, 2339:14–2340:18, 2343:2–18 (discussing DDM D at 14); *see generally* Trial Tr. vol. 8, East, 1556:8–14, Jan. 19, 2023)). Dr. Riddiough applied this estimate to Rock Creek, Silverlake, Buckman, and Chauncy House. (Trial Tr. vol. 11, Riddiough, 2341:3–2344:3, Jan. 24, 2023). For Cedar Gardens, the prepayment eligibility date in 1991 was before the issuance of LIHPRHA interim regulations, so Dr. Riddiough followed counsel's "instruction to assume that it would have been reasonable for the Cedar Gardens owners to expect" to wait "[eighteen] months before they could start the process." (*Id.*, 2344:14–2345:18). Therefore, the

Cedar Gardens delay estimate was eighteen months plus the thirty-eight months, for a total of fifty-six months. (*Id.*, 2345:14–18).

Dr. Riddiough then used the unrestricted and restricted *ex ante* property values in his economic impact formula. (*Id.*, 2357:20–2359:14 (discussing DDM D at 18)). At trial, Dr. Riddiough noted that "[w]here a higher percentage indicates more severe impact, you can't go bigger than 100 percent under the assumption that the property owners have limited liability, meaning you can't lose more than what you have." (*Id.*, 2358:4–10). Dr. Riddiough did not assume that the property owners would refinance. (*See* Rule 63 Hr'g Tr. vol. 2, Riddiough, 287:18–25, July 9, 2024).

Dr. Riddiough used the Gordon growth model to calculate discount rates for the FWP properties. (Trial Tr. vol. 11, Riddiough, 2347:7–2349:4, Jan. 24, 2023). The Gordon growth model "us[es] the link that exists between capitalization rates for commercial real estate projects and . . . property discount rates." (*Id.*, 2348:20–2349:4). Dr. Riddiough used different rates tailored to the geographic markets of each property. (*Id.*, 2354:20–2356:3) (discussing DDM D at 16)). Dr. Riddiough used a 13.25% discount rate for Cedar Gardens, a 12.75% discount rate for Rock Creek, a 12% discount rate for Silverlake, a 13% discount rate for Buckman, and an 11% discount rate for Chauncy House. (*Id.*, 2355:24–2356:3). Ultimately, Dr. Riddiough found an economic impact of 27.4% for Cedar Gardens, 24.2% for Rock Creek, 13.1% for Silverlake, 17.1% for Buckman, and 5.9% for Chauncy House. (*Id.*, 2359:12–14; *see also* Rule 63 Hr'g Tr. vol. 2, Riddiough, 254:3–256:15 (discussing DDM D at 18)).

III. Conclusions of Law

The law governing regulatory takings is subject to frequent criticism and is generally considered "a muddle." *See* Dave Owen, *The Realities of Takings Litigation*, 47 B.Y.U. L. REV. 577, 594 (2022). As *Penn Central* noted, regulatory takings require "essentially ad hoc, factual inquiries," but three factors are particularly relevant in determining whether a taking has occurred. *Penn Central*, 438 U.S. at 124. The *Penn Central* factors are: (1) the economic impact of the regulation on the claimant; (2) the extent to which the regulation has interfered with reasonable distinct investment-backed expectations; and (3) the character of the governmental actions. *Id.* Whether these factors constitute a balancing test, a "one strike and you're out" test, or something in between is the path the Court attempts to plow today.[20] The *Penn Central* Court

[20] The Court has turned to academia to shed some light on the *Penn Central* test. *See* Adam R. Pomeroy, *Penn Central After 35 Years: A Three Part Balancing Test or a One Strike Rule?*, 22 FED. CIR. B.J. 677 (July 2013). Ironically, one of the more vocal critics of *Penn Central* and its progeny was FWPs' first expert. *See* William W. Wade, *Federal Circuit's Economic Failings Undo the Penn Central Test*, 40 ENVTL. L. REP. NEWS & ANALYSIS 10914 (September 2010). Two of Dr. Wade's previous academic articles were admitted as evidence by this Court's predecessor judge: William W. Wade, *Economic Backbone of the Penn Central Test after Florida Rock V, K&K, and Palazzolo*, 32 ENVTL. L. REP. NEWS & ANALYSIS 11221 (October 2002) (admitted as DX 613); and William W. Wade, *Sources of Regulatory Takings Economic Confusion Subsequent to Penn Central*, 41 ENVTL. L. REP. NEWS & ANALYSIS 10936 (October 2011) (admitted as DX 678). (*See* Evidentiary Rulings and Status Report Order, ECF No. 709).

also noted that "[a] 'taking' may more readily be found when the interference with property can be characterized as a physical invasion by government . . . than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good." *Id.* at 124 (internal citations omitted). In other words, it depends. Determining when a regulation goes too far, or otherwise equates to a physical invasion, offers no readily determinable standard. As recently as 2021, Justice Thomas has urged a fresh look at the "standardless standard" of the *Penn Central* test for determining when regulation of property constitutes a compensable taking under the Fifth Amendment. *Bridge Aina Le'a*, *LLC v. Hawaii Land Use Comm'n*, 141 S.Ct. 731, 731–32 (2021) (Thomas, J. dissenting from denial of certiorari). Currently, courts must conduct an intensive factual inquiry with little predictability regarding outcomes. Here, the Court has done just that.

The Court is aided in this wide-ranging inquiry by guidance provided in the most recent Federal Circuit precedent established in *Cienega X* and *CCA Associates. Cienega X*, 503 F.3d at 1282; *CCA Assocs.*, 667 F.3d at 1246. In *Cienega X*, the Federal Circuit elaborated on the framework for economic impact analysis. *See Cienega X*, 503 F.3d at 1275–82. There, the Federal Circuit held that trial courts were required to consider the impact of the Preservation Statutes on the property as a whole, offsetting benefits to the property owners, and the duration of the legislation. *Id.* at 1277–78. *Cienega X* also detailed two possible approaches for measuring economic impact on property owners but declined to endorse one approach over the other. *Id.* at 1282. Four years after *Cienega X*, the Federal Circuit reluctantly applied this framework in *CCA Associates*. *CCA Assocs.*, 667 F.3d at 1244 ("Even if we are sympathetic to the arguments challenging the propriety of the economic analysis required by *Cienega X* . . . we cannot consider these arguments at the panel stage. Panels are bound by the law of prior panels.") (citation omitted). The *CCA Associates* Court further refined the analysis of the economic impact and reasonable investment-backed expectations elements of *Penn Central. See id.* at 1244–48. There, the Court held that an economic impact of eighteen percent was not sufficient to establish a regulatory taking and that multiple objectively reasonable investment strategies can coexist—but plaintiffs need to demonstrate that it was objectively reasonable for them to view the twenty-year prepayment clause as a "but for" reason for investment. *Id.* at 1246–48. The guidance established in *Cienega X* and *CCA Associates* is particularly relevant for the Court's analysis of the first two elements of *Penn Central*: economic impact and reasonable investment-backed expectations.

The third prong of *Penn Central* concerns the character of the government action. The Federal Circuit has repeatedly affirmed its holding that "the government's actions in enacting ELIHPA and LIHPRHA, insofar as they abrogated the [plaintiffs'] . . . contractual rights to prepay their mortgages and thereby exit the housing programs, had a character that supports a

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Until his engagement in this litigation, Dr. Wade harshly criticized the developing jurisprudence of regulatory takings in the context of low-income housing investments: "*Cienega X* is a radical back step in the understanding of Penn Central's economic prong for incoming producing properties." (Wade Dep. 245:1–6). Notably, in his deposition, Dr. Wade was asked about one of his articles (*Economic Backbone of Penn Central Test After Florida Rock V, K&K, and Palazzolo*) and stated that he no longer stood by the conclusions therein and that it represents "a place on the continuum of my life and learning, and I find problems with each of those sentences today." (Wade Dep. 166:11–168:9, JX 201).

holding of a compensable taking." *CCA Assocs.*, 667 F.3d at 1248 (citing *Cienega Gardens v. United States*, 331 F.3d 1319, 1340 (Fed. Cir. 2003) ("*Cienega VIII*")). The Court agrees with the FWPs that the issue of whether the Preservation Statutes have the character of a taking has already been resolved in the affirmative as a matter of law. *See Anaheim Gardens (2018)*, 140 Fed. Cl. at 86 ("[T]he character of the governmental action factor weighs in favor of finding that a taking was effected by the Preservation Statutes vis-à-vis the FWPs") (citing *Cienega VIII*, 331 F.3d at 1340); *see also CCA Assocs.*, 667 F.3d at 1248. However, "[w]hile the character of the government's action supports finding a taking, it is not dispositive of this issue." *CCA Assocs.*, 667 F.3d at 1248.

The Federal Circuit has determined that the existence of a single *Penn Central* factor is not dispositive, though whether all three must be established in order to find that a taking occurred remains unsettled. *See CCA Assocs.*, 667 F.3d at 1248 ("[T]he Court of Federal Claims correctly held that 'the character of the government action is not such as to deliver the dispositive blow that CCA has hoped, [but] it nonetheless weighs in favor of a finding of a regulatory taking.'") (citing *CCA Assocs. v. United States*, 91 Fed. Cl. 580, 602 (2010)). Additionally, the *Penn Central* analysis is not necessarily limited to the three enumerated factors. *See Penn Central*, 438 U.S. at 123–28. Here, however, absent a convincing basis from the trial testimony regarding some other consideration, the Court focuses its inquiry on the two unresolved factors of the *Penn Central* test—the economic impact of the government regulation and the reasonable investment-backed expectations of the property owners. The Court first turns to the investment-backed expectations of the FWPs, then to the alleged economic impact.

A. Investment-Backed Expectations

Cienega X lays the foundation for testing whether a property owner had a reasonable investment-backed expectation of prepayment. *Cienega X*, 503 F.3d at 1289. "By comparing the individual's expectations with the 'expectations of the industry as a whole,' we aim[] to separate unreasonable, though subjectively believed, investment[-]backed expectations from objectively reasonable expectations." *CCA Assocs.*, 667 F.3d 1247 (quoting *Cienega X*, 503 F.3d at 1290). Under this prong, "[t]he burden is on the owners to establish a reasonable investment-backed expectation in the property at the time [they] made the investment." *Cienega X*, 503 F.3d at 1288 (citation omitted). The *CCA Associates* Court held that "there can potentially be multiple objectively reasonable investment strategies dictated by geography, economics, or other factors." *CCA Assocs.*, 667 F.3d at 1247.

The *CCA Associates* Court also held that the plaintiff "has the burden to present sufficient evidence of these other strategies to establish that it was objectively reasonable for it to view the [twenty]-year prepayment clause as the primary or 'but for' reason for investment." *Id.* This investment-backed expectations prong "requires a multistep analysis." *Id.* (citing *Cienega X*, 503 F.3d at 1289). As the Court understands the relevant precedent, the first step is to establish whether FWPs sufficiently demonstrated that the ability to prepay their mortgage after twenty years was the primary reason for their investment. *CCA Assocs.*, 667 F.3d at 1247. If so, the second step is to then determine whether this expectation was objectively reasonable given industry practice as a whole. *Id.* at 1248. The first step of this test is subjective, and the second is objective. *Id.* at 1247–48.

Precedent for evaluating the second, objective component of the reasonable investment-backed expectations element is sparse. In *CCA Associates*, the Court noted that the only evidence offered to support the objective reasonability of the investment-backed expectations was "a quote from a 1972 guide which indicated that a project located 'in a growing suburban or exurban area . . . *may* increase in value over the years, thus creating *substantial residual profits* to the investors upon sale or disruption'" which was not enough to "support the ultimate conclusion that it was objectively reasonable to view the [twenty]-year prepayment as either the principle or but for cause of investment." *Id.* at 1247–48 (quoting *CCA Assocs.*, 91 Fed. Cl. at 608 (emphasis in original)). The Court there also examined prospectuses for some of the property developers but held that they "described the potential benefits for investing in the projects as being *primarily* tax benefits and *secondarily* cash distributions." *CCA Assocs.*, 667 F.3d at 1248 (quoting *CCA Assocs.*, 91 Fed. Cl. at 608 (emphasis in original)).

Here, the FWPs proffered testimony, prospectuses, mortgage notes, and emails in their attempt to establish reasonable investment-backed expectations. This Court has previously held that fact witness testimony could be used to establish the reasonableness of FWPs' expectations, "measured objectively, by industry standards, at the time the investments were made." *Anaheim Gardens (2018)*, 140 Fed. Cl. at 88; *accord CCA Assocs.*, 667 F.3d at 1248. The Court agrees that many of the FWPs' fact witnesses "have broad experience in the real estate market and have participated in a number of organizations which broadly represent the real estate investment sector of the American economy." *Anaheim Gardens (2018)*, 140 Fed. Cl. at 88.

As explained below, the Court ultimately finds that Chauncy House, Buckman, and Rock Creek failed on the first step; these property owners did not establish that the expectation to prepay was the primary reason for their investment. The Court also finds that Cedar Gardens and Silverlake sufficiently established reasonable investment-backed expectations to satisfy the second *Penn Central* factor. This, however, does not change the Court's overall opinion that no taking occurred.[21] The Court turns to each FWP individually.

1. <u>Buckman</u>

Buckman did not demonstrate subjective investment-backed expectations. Three individuals testified on behalf of the investment-backed expectations of the Buckman Gardens Partnership: Barry Gosnell, Murray Haber, and John Wall. Two of the three had limited direct knowledge of the property. The first, Mr. Barry Gosnell, was born in 1955, (B. Gosnell Dep. 22:21–23, JX 202), and was "15, [or] 16" in 1971 when his father and uncle invested in Buckman. (B. Gosnell Dep. 48:3). Mr. Gosnell's testimony was speculative. The parties engaged in a series of arguments regarding the admissibility of Mr. Gosnell's testimony, which was

[21] But for the economic impact precedent set in *Cienega X* and *CCA Associates*, the Court would award Cedar Gardens and Silverlake damages in accordance with Dr. Riddiough's economic loss figures. *See Cienega Gardens v. United States*, 503 F.3d 1266 (Fed. Cir. 2007); *CCA Associates v. United States*, 667 F.3d 1239 (Fed. Cir. 2011). However, try as it might, the Court cannot logically avoid using the economic impact element of *Penn Central* as a threshold inquiry as applied in *CCA Associates. See CCA Assocs.*, 503 F.3d at 1242; *see also Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104 (1978).

resolved in an Opinion and Order issued by the Court's predecessor judge. (Order Denying in Part, ECF No. 716). Mr. Gosnell was not particularly involved in the partnership and could not speak to the motivations of the investors:

> Q: Did you personally have any involvement in the original setting up of the partnership or in obtaining limited partner investors?
>
> A: No.
>
> Q: Do you know what role your father had in obtaining limited partner investors?
>
> A: Other than being the general partner, no . . . .
>
> Q: Do you know what roll your uncle had, Mr. Clarence Gosnell, in obtaining other investors or limited partner investors?
>
> A: Same answer.

(B. Gosnell Dep. 44:10–24, 47:9–13 (Q: "Why was it that they chose to develop the Buckman Road project as a Section 236 project as opposed to as a conventional project?" A: "I'd have to speculate. I'm not sure the exact reasoning behind it.")). When questioned, FWPs' counsel agreed that Mr. Gosnell was not "involved firsthand . . . because he was 16 years old." (Hr'g Tr., FWPs' Counsel, 17:6–9, Oct. 15, 2024, ECF No. 790).

The second witness, Mr. Wall, was not involved with Buckman until his firm was retained to assist with the LIHPRHA process. (*See* Trial Tr. vol. 4, Wall, 759:16–760:13, Jan. 12, 2023). Mr. Wall's testimony was limited by this Court's predecessor judge "to the properties that he's identified that are parties in this particular action or that he's discussed . . . ." (Trial Tr. vol. 5, Court, 958:3–12, Jan. 13, 2023). Even though Mr. Wall's testimony was limited in its scope, the Court still finds much of it attenuated. (*See id.*, 944:16–19 ("It is my opinion that most owners I knew and associated with had a reasonable expectation to prepay their mortgages after [twenty] years.")). The expectations of such investors is a subjective inquiry, not readily reduceable to generalized statements about "most owners."[22] The Court finds that the testimony of Mr. Gosnell and Mr. Wall is insufficient to establish actual expectations to prepay.

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[22] Were it sufficient, the reasonable expectations of uncounted low-income property investors would require no more than a single witness to proudly proclaim "of course they did" when asked if the prepayment option was the primary, or but for, justification for investment. Satisfaction of this requirement, crafted by the U.S. Supreme Court and the Federal Circuit, is not a *de minimus* box which can be checked by anyone with some familiarity with low-income housing investments. The Court requires more, and given the other advantages offered by such investments, rejects Mr. Wall's bold but unsupported declaration. Without doubt, the unusual delay between inception and trial hinders potential plaintiffs in meeting this subjective element as memories fade, witnesses pass, and documents are lost to passing decades, affirming yet again the crucial importance of adhering to the goals of RCFC 1 seeking the inexpensive, speedy, and

However, Buckman also presented Mr. Murray Haber, a Class A limited partner in Buckman Gardens Partnership. (JSOF at ¶ 19; PX 475). Mr. Haber was an experienced real estate investor, including in Section 221(d)(3) and 236 projects. (Haber Dep. 13:2–21, JX 186). He invested in Buckman and similar properties, expecting that they would increase in value over time. (Haber Dep. 70:25–71:4). Many years later, Mr. Haber expressed disappointment with the Preservation Statutes in a draft letter to the investor limited partners dated April 7, 1993. (*Id.*, 73:2–74:10; JX 45 at IRH 0039729 ("unfortunately, the government reneged on that promise [to allow owners to prepay]")). However, the Court is not persuaded that Mr. Haber primarily relied on the twenty-year prepayment provision when considering whether to invest. In fact, when asked about his criteria for determining whether to "syndicate" a property, Mr. Haber did not refer to the ability to prepay and convert to market-rate housing. (Haber Dep. 79:25–80:15 (stating that he considered "the financial strength of the general partner, the location of the project, what I think the project might be down the line, well, the neighborhood, the quality of the general partner . . . .")). While more compelling than the testimony of Mr. Gosnell and Mr. Wall, Mr. Haber's testimony—considered individually and collectively—falls short to establish that the prepayment and conversion to market rate rentals was *the* primary reason, or even *a* primary reason for the investment in Buckman. Accordingly, Buckman's proof of this element fails.

2. Chauncy House

Like Buckman, Chauncy House also did not meet its burden to demonstrate that its investors had objectively reasonable expectations at the time of the original investment of being able to prepay and convert to market-rate housing after twenty years. *See Cienega X*, 503 F.3d at 1290. In February of 1974, Chauncy House issued a prospectus (or PPM) that stated:

> The economic incentives for investment in the Partnership are (1) an annual cash distribution if funds are available therefore, (2) the availability of [fifty percent] of the net proceeds from the refinancing, sale, or other disposition of the assets of the Partnership, and (3) federal tax benefits due to the Partnership's ability to use accelerated depreciation methods and a [sixty] month amortization method for qualified rehabilitation expenses.

(JX 65 at IRH0048530; JSOF at ¶¶ 68, 69; *see also* Trial Tr. vol. 3, Reagan, 509:10–510:13, Jan. 11, 2023).

Significantly, the prospectus did not present a plan for conversion to market-rate housing at the twenty-year date. (JSOF at ¶¶ 68, 69; JX 65 at IRH0048530, IRH48538). The investor limited partners were to "receive [ninety-five percent] of the profits and losses and cash distributions from the normal operations of [CHC]" and the general partners and limited partners were to receive "the remaining [five percent] of such profits and losses and cash distributions." (JX 65 at IRH 0048506; Trial Tr. vol. 3, Reagan, 506:19–507:14, Jan. 11, 2023). The language in

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just resolution of every action. (*See* Hearing Tr., 16:1–3, Oct. 15, 2024 (FWPs' counsel acknowledging loss of witnesses)).

the prospectus is insufficient to establish the existence of prepayment expectations for the investors of Chauncy House.

Chauncy House also relied on the testimony of John R. Gallagher III, Jr., (Gallagher Dep., JX 184), and James Reagan, (Reagan Dep., JX 194), to support their assertion of reasonable investment-backed expectations. (Trial Tr. vol. 2, Reagan, 420:1–12, Jan. 10, 2023). Mr. Gallagher was one of two general partners who created the CHC. (JSOF at ¶ 66). Mr. Gallagher testified that CHC never would have invested money or developed it under the Section 236 program if CHC did not have the right to prepay after twenty years. (Gallagher Dep. 69:18–70:11). Mr. Reagan was a Certified Public Accountant at State Street Development Company of Boston, the developer of Chauncy House. (Trial Tr. vol. 2, Reagan, 421:10–422:1, Jan. 10, 2023; Reagan Dep. 12:20–23). During his deposition, Mr. Reagan also testified in support of the partners' investment-backed expectations, explaining that the partners' "general expectation was that real estate values would continue to increase during the [twenty]-year period as they had during the prior [thirty] years before the development of [Chauncy House] and that there would be an opportunity after [twenty] years to do a refinancing or a sale of the property . . . ." (Reagan Dep. 50:17–51:4).

Mr. Reagan also testified generally about "phantom income" being a concern for owners of Section 221(d)(3) and 236 projects if they could not prepay their mortgages. (Trial Tr. vol. 3, Reagan, 518:13–519:11, Jan. 11, 2023).[23] This testimony was offered at trial, decades after Chauncy House made its investment decision. This testimony conflicts with a contemporary written prospectus documenting the advantages of investment and omitting any mention of prepayment and conversion to market-rate rentals. (*See* DX 85). Even if this testimony were sufficiently persuasive to overcome the weight of the conflicting prospectus, any reasonable investment-backed expectations that might have existed were frustrated by the existence of a regulatory agreement with the Boston Redevelopment Authority ("BRA") which precluded prepayment.

In 1975, the CHC entered into a forty-year regulatory agreement with the BRA, that provided that the CHC partners would not "receive or accept, while this Regulatory Agreement is in force, as net income from the Project any sum in the excess of six percent (6%) of the amount invested by them in the Project for each year in which they own or have owned the Project . . . ." (DX 85 at 3–4). The limit on this annual distribution was $13,352. (Trial Tr. vol. 3, Reagan, 617:3–618:5, Jan. 11, 2023). Mr. Maurice Barry, who worked at HUD, testified that the city of

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[23] Specifically, Mr. Reagan testified that "[p]hantom income relates to investors having to write out checks to pay taxes when there's no funds available from the project that generated those taxes to give them the cash, so therefore they have to out-of-pocket make those payments every year that they have the phantom income. (Trial Tr. vol. 3, Reagan, 518:13–519:5, Jan. 11, 2023). Mr. Reagan also stated that if the investors didn't prepay the mortgage loan on the project, "[t]here wouldn't be sufficient funds because the amount of the taxes owed [would increase] since there is more principal and amortization on the mortgage loan than there is in interest payments." (*Id.*, 518:25–519:3). He explained that "[i]nterest payments reduce your taxable income, but if you're paying down the debt[,] . . . you're not getting any deduction for that." (*Id.*, 519:3–5).

Boston "put [the regulatory agreement in] place for [forty] years for the owner to provide low and moderate income housing" and "had a right . . . to enforce" it. (Trial Tr. vol. 9, Barry, 1726:12–1727:11, Jan. 20, 2023). Mr. Gallagher was one of the signatories of the BRA agreement. (DX 85 at 8; Trial Tr. vol. 3, Reagan, 607:22–608:23 Jan. 11, 2023). In a letter dated April 15, 1992, addressed to "Investor Limited Partner" of Chauncy House, Mr. Gallagher wrote:

> Although the Chauncy House development will not reach the end of the restrictive period required by the mortgage documents until October 1995, and is not affected by the legislation above at this time, the manner in which the government deals with those projects reaching the end of their restrictive periods over the next several years will have a direct impact on the future uses available to our development.
>
> In addition, any change in the use of the property after October 1995 and before April 2015 would require the approval of the [BRA]. Because the property is located adjacent to the Chinese residential community which has experienced a serious housing shortage, there may be some opposition to granting such approval. Accordingly, it is likely the project will continue to provide housing for those income groups for which the housing was originally developed.

(JX 69 at IRH48558). Trial did not adduce evidence that BRA approval for use as market-rate housing was sought or granted. The Court finds it illogical that CHC investors could reasonably expect the ability to prepay and convert to market-rate housing when they were bound by a separate regulatory agreement that expressly prohibited these actions, even after the supposed prepayment date under the Preservation Statutes.

In response, Chauncy House points to Mr. Reagan's suggestion that prepayment and conversion to market-rate housing were not changes that needed to be approved by the BRA.

> Q: Is there any evidence that the partnership intended at the time of its initial investment to convert the property to market rate apartments?
>
> A: I'm not aware of any documentation. I think no decisions were made as to what to do with it during that [twenty-]year period because you couldn't do anything at that time and you could consider what your options were at the time when you had the option to do something . . . .

(Reagan Dep. 38:24–39:18). The United States also argues that "the general partners knew that the Boston Redevelopment Authority approval of a change in use away from low-income housing was necessary prior to 40 years and that it was unlikely to be granted." (Hr'g Tr. Def.'s Counsel, 31:21–32:6, 81:1–6, Oct. 15, 2024). The Court is persuaded by the United States' argument. Considering the prospectus, Mr. Reagan's testimony, and the BRA Agreement, the Court determines that the Chauncy House investors did not view prepayment as the primary or "but for" reason for investment in Chauncy House. Not only is there no contemporary evidence, but the BRA Agreement also expressly eliminated that possibility.

3. Rock Creek

Rock Creek also failed to meet their burden. Rock Creek presented testimony from Nicholas Billings, (Billings NCHP Dep., JX 196; Billings NHP Dep., JX 197), and John Wall, (Wall Dep., JX 198), to establish reasonable investment-backed expectations. Mr. Billings testified on behalf of the National Corporation of Housing Partnerships ("NCHP"), (Billings NCHP Dep.), and for the National Housing Partnership ("NHP"), (Billings NHP Dep.), as their Rule 30(b)(6) witness. Mr. Billings could not "quantify" NCHP's primary motivation for investing in Rock Creek. (Billings NCHP Dep. 39:8–40:19 ("I don't know that there was a primary benefit. I do know that in projects of this type and during this time period, there were a handful of benefits . . . .")). When asked about NHP's choice to invest in Rock Creek, Mr. Billings answered: "[f]or the same reasons that National Corporation for Housing Partnerships decided to be a general partner in the same partnership. Both NHP and NCHP were created for the purpose of acquiring, developing, managing affordable housing." (Billings NHP Dep. 13:13–23).

Mr. Billings did reference tax benefits and property value appreciation as "presumably" being other benefits, in addition to "the ability to realize the property appreciation at sale or refinance and eventually convert it to an alternative use." (Billings NCHP Dep. 39:8–22; *see also* Billings NHP Dep. 13:13–14:7). However, Mr. Billings noted that, of those benefits, he could not "responsibly . . . quantify which [was] the primary motivation." (Billings NCHP Dep. 39:8–15; *see* Billings NHP Dep. 13:13–23 (adopting same testimony for NHP)). Similarly, although Mr. Billings offered some conjecture about NCHP's and NHP's "expectations regarding the prepayment of the mortgage," based solely on the language of the limited partnership agreement, (Billings NCHP Dep. 31:18–32:12, 32:24–33:5; Billings NHP Dep. 21:10–16), when asked if NHP "would . . . have invested in the project if it could not have prepaid after [twenty] years[,]" Mr. Billings stated: "I don't know." (Billings NHP Dep. 25:25–26:3). This candid testimony is convincing.

In addition to Buckman, Mr. Wall also testified on behalf of Rock Creek. Mr. Wall worked for Mid-City Developers, Inc. ("Mid-City"), another developer of Rock Creek. (Wall Rock Creek Dep. 19:10–20:20, 21:8–20; PX 297). Mr. Wall also testified on behalf of Mid-City, (Wall Mid-City Dep., JX 195). According to Mr. Wall, Rock Creek filed a NOI in March 1994 indicating an intent to seek a sale of the property, which was "[t]rying to make lemonade out of lemons" under the LIHPRHA restrictions. (Wall Mid-City Dep. 68:8–13, 81:10–13). He also asserted that "prior to LIHPRHA," Rock Creek's general and limited partners wanted to prepay and convert the property to market-rate rentals. (Trial Tr. vol. 5, Wall, 923:10–17, Jan. 13, 2023). However, Mr. Wall was not directly involved in Rock Creek investors' decision-making process. (*See* Wall Mid-City Dep. 18:10–16 (stating that he had "no firsthand knowledge" of any projections Mid-City would have made regarding its expectations for a return on its investment); *id.* at 22:17–18 (stating that he "cannot speak to . . . [w]hether or not" tax incentives were a primary factor in a decision to invest in Rock Creek); *id.* at 43:3–22 (responding "I can't answer" when asked how long the partnership expected to hold the property)). Based on the evidence provided, the Court cannot find that the expectation to prepay was the "primary" or "but for" reason for investment in Rock Creek. In fact, testimony from Mr. Billings would seem to point in the opposite direction—that maintaining Rock Creek as affordable housing was the intended purpose of NHCP all along. (*See* Billings NCHP Dep. 15:7–15).

4. Silverlake

Unlike Buckman, Chauncy House, and Rock Creek, Silverlake established a reasonable investment-backed expectation in the ability to prepay after twenty years. The FWPs presented testimony from Mr. Todd Spieker to support the assertion that investors held reasonable investment-backed expectations about their right to prepay the mortgage. (Spieker Dep. JX 188). Mr. Spieker is highly experienced in the sale, development, and management of multifamily rental housing, including both market rate and affordable housing participating in the 221(d)(3) and 236 programs. (Trial Tr. vol. 1, Spieker, 33:3–34:1, Jan. 9, 2023). Mr. Spieker owned or had ownership interests in multiple Section 221(d)(3) and Section 236 properties, including Silverlake. (*Id.*, 47:7–48:1, 67:10–68:6, 70:1–5).

Mr. Spieker and his wife were the general partners of 3740 Silverlake and purchased Silverlake on December 1, 1986. (JSOF at ¶¶ 102, 106). 3740 Silverlake acquired Silverlake by assuming the original mortgage and executing a purchase money note, the terms of which were linked to the right to prepay the original mortgage on Silverlake as of the prepayment eligibility date. (*See* Trial Tr. vol. 2, Levy, 308:24–309:7, Jan. 10, 2023; JX 122). Prior to purchasing Silverlake, Mr. Spieker owned more than ten other multifamily properties. (Spieker Dep. 23:16–24:2). Mr. Spieker testified that he purchased Silverlake intending to prepay and convert the properties to market rentals. (*Id.*, 13:8–17, 15:12–16; Trial Tr. vol. 1, Spieker, 71:25–72:14, Jan. 9, 2023). The "only reason" Mr. Spieker "bought the property was the . . . right to prepay the mortgage in September of 1993" and that he expected to retain Silverlake after prepayment to take advantage of income from market rentals. (Trial Tr. vol. 1, Spieker, 72:12–14, 95:21–96:6, Jan. 9, 2023; Spieker Dep. 18:10–19:3). Mr. Spieker further asserted that he did not purchase Section 221(d)(3) or Section 236 projects for the tax benefits. (*See* Trial Tr. vol. 1, Spieker, 52:23–53:6, Jan. 9, 2023 ("that was not important to me, and there was no special treatment being low-income property, it was the same treatment as any other property I buy, market rate or otherwise."). The Court is persuaded by Mr. Spieker's testimony asserting that he purchased Silverlake primarily for the ability to prepay and convert to market-rate rentals after twenty years and therefore agrees that Mr. Spieker established an actual and subjective expectation of prepayment. *See Cienega X*, 503 F.3d at 1288; *CCA Assocs.*, 667 F.3d at 1247.

The Court also finds that Silverlake's "expectations were objectively reasonable in light of industry practice as a whole." *CCA Assocs.*, 667 F.3d at 1248. Silverlake's purchase money note incorporates the HUD Regulatory Agreement and contains the following language:

> Principal and interest on the Note shall be paid in equal monthly installments of Twelve Thousand Four Hundred Thirty-Five Dollars and Ninety-nine Cents ($12,435.99), less the interest reduction payment made by HUD, until September 14, 1993. Thereafter, Buyer shall have ninety (90) days to pay the remaining principal and interest which shall all be due and payable in one lump sum payment.

(JX 122 at IRH0062955). The HUD Regulatory Agreement is extremely restrictive and clearly limits the income available to Mr. Spieker while participating in the program. (JX 123 at IRH 0002069 ("Owners shall not without the prior written approval of the Commissioner . . . [m]ake, or receive and retain, any distribution of assets or any income of any kind of the project, except

from surplus cash and except on the following conditions . . . .")). The Court is convinced that the option to prepay was Mr. Spieker's primary reason for investing in Silverlake and that this expectation was objectively reasonable given industry standards.

The Court in *CCA Associates* found that "factors associated with the location and character of projects" can influence the reasonable expectation of the owners, which should be "judged on an objective and not a subjective basis." *CCA Assocs.*, 667 F.3d at 1247 (citing *CCA Assocs.*, 91 Fed. Cl. at 609). Silverlake is located in Los Angeles, and when 3740 Silverlake purchased the property, it was in an area with property values that were, and still are, appreciating. (JSOF at ¶ 104; Spieker Dep. 20:4–12). Mr. Spieker was familiar with the real estate market in Los Angeles and acquired Silverlake because the community was attractive. (*See* Trial Tr. vol. 1, Spieker, 67:20–69:15, Jan. 9, 2023). These are all indications that Mr. Spieker held a reasonable expectation of the ability to prepay Silverlake's mortgage and exit the program. Mr. Spieker's objective expectation was also reasonable given industry standards, as discussed below. Therefore, Silverlake satisfies the reasonable investment-backed expectations element of the *Penn Central* analysis.

5. Cedar Gardens

Like Silverlake, Cedar Gardens also established a reasonable investment-backed expectation in the ability to prepay after twenty years. CGA presented testimony from James Bancroft and Lawrence Levy to support its claim of investment-backed expectations. (Bancroft Dep. (Aug. 28, 2013), JX 182; Bancroft Dep. (Aug. 29, 2013), JX 183; Trial Tr. vol. 2, Levy, 283:5–284:1, 285:21–286:6; 306:20–307:16, 363:10–364:6, 365:16–366:13, 369:3–14, Jan. 10, 2023). Mr. Bancroft was one of the initial three partners of CGA. (JSOF at ¶ 43; *see also* Bancroft Dep. (Aug. 28, 2013), 10:16–241). Mr. Bancroft testified by deposition that CGA built Cedar Gardens with single-family units and semi-private patios, which FWPs argue indicated a reasonable expectation of their investors to prepay under LIHPRHA and convert to market-rate rentals.[24] (Bancroft Dep. (Aug. 28, 2013), 18:13–19:6, 20:14–21:20). CGA believed that the development of the California State University, Fresno nearby "would create a whole new neighborhood in that part of Fresno, a prime residential neighborhood" presumably for market-rate rentals. (*See id.*, 38:8–40:1). In his deposition, Mr. Bancroft testified that he knew the university was in the planning stages before CGA "even thought about building Cedar Gardens" and would "completely change[] the character of that part of town and encourage[] residential development . . . ." (*Id.*, 38:8–19). Mr. Bancroft and another initial investor in Cedar Gardens also purchased an adjacent property to improve the entryway into Cedar Gardens and to add more units to Cedar Gardens after prepayment. (*Id.*, 22:11–15, 24:11–14; Bancroft Dep. (Aug. 29, 2013), 84:20–85:20).

[24] Mr. Bancroft died prior to trial (JSOF at ¶ 44). FWPs moved to designate his deposition testimony, along with the testimony of John R. Gallagher, III. (ECF No. 508). The United States did not oppose the designation of either testimony, (ECF No. 519), and the Court granted FWPs' motion in relevant part, (ECF No. 560). FWPs designations and counter-designations of Mr. Bancroft's August 28, 2013, and August 29, 2013, deposition testimony were admitted by this Court's predecessor judge. (ECF No. 709).

In his deposition, Mr. Bancroft testified that he "expected to own [Cedar Gardens] until [CGA] carried out [its] long-range plan to convert it to a market rate project and do whatever upgrade [CGA] needed to do and take advantage of the location." (Bancroft Dep. (Aug. 29, 2013), 65:1–5). Tellingly, Mr. Bancroft "wouldn't have touched the project with a [ten]-foot pole if [he] didn't have the right to prepay in [twenty] years." (Bancroft Dep. (Aug. 28, 2013), 66:6–8). Mr. Bancroft also understood that "we had an absolute right to pre-pay after [twenty] years . . . ." (*Id.*, 15:13–14). The Court finds that Mr. Bancroft had an actual expectation to prepay and that this was the primary reason for the partners' investment in Cedar Gardens.

CGA also presented Mr. Levy, a lawyer specializing in HUD-insured housing transactions and representing both CGA and 3740 Silverlake. (*See* Trial Tr. vol. 2, Levy, 283:5–284:1, 285:21–286:6; 306:20–307:16, 363:10–364:6, 365:16–366:13, 369:3–14, Jan. 10, 2023). During a visit to Cedar Gardens in October 1992, he saw "an adjacent parcel that was going to be connected to Cedar Gardens" which "was purchased so that when the owner prepaid they could then consolidate the parcels and create a new . . . entryway, into the property." (*Id.*, 373:24–376:1–24, 377:4–21). Mr. Levy's testimony unequivocally demonstrates that Cedar Gardens investors harbored an expectation of prepayment, an expectation that was ultimately obstructed by the Preservation Statutes.

Trial testimony confirms that the Cedar Gardens investors relied on the twenty-year prepayment provision as a primary reason for investment. *See Cienega X*, 503 F.3d at 1288. Therefore, the investors' subjective investment-backed expectations have been established. Furthermore, Cedar Gardens' Secured Note uses language supporting the investors' expectations of their right to prepay. (*See* PX 92).

While the subjective expectations to prepay vary greatly depending on the group of investors and the property, it would be nonsensical for the Court to find that one group of FWP investors had established expectations that were "objectively reasonable in light of industry practice as a whole" and another had not. *CCA Assocs.*, 667 F.3d at 1248. Testimony from former HUD employees support the assertion that it was objectively reasonable for the FWPs to view the twenty-year prepayment as the principal or but for reason for their investment. Both Jane Hulbert, who started working for HUD in 1967, and Frank Malone, who started working for HUD in or around 1974, "understood that owners with 221(d)(3) and 236 projects with notes containing prepayment provisions would have been allowed to prepay [twenty] years after the final endorsement of their mortgage notes but for the Preservation Statutes." (JSOF at ¶¶ 12–13).

To refute the reasonableness of FWPs' objective investment-backed expectations, the United States presented expert testimony from Kenneth Malek. Mr. Malek has been a certified public accountant for over forty years (Trial Tr. vol. 9, Malek, 1733:25–1734:4, Jan. 20, 2023), and helped investors structure their investments in low-income housing developments from 1978 through 1985, (*id.*, 1745:24–1753:13). Mr. Malek testified that the tax benefits, not prepayment, were the primary economic return for the FWPs. (*Id.*, 1763:20–1764:6, 1788:4–6 ("the tax benefits predominated the transactions on its own and the residual was of limited to inconsequential value depending upon the return rate.")). In other words, Mr. Malek determined that the early tax benefits were more valuable than a hypothetical residual twenty years later. (*Id.*, 1839:9–1840:3, 1764:25–1765:2 ("it is clear numerically . . . that the residual expectation cannot be the primary or but-for investment motivation.")). Mr. Malek also acknowledged the problem

of "phantom income" for partnerships that owned Section 221(d)(3) or 236 projects if they could not prepay their mortgage loans. (*Id.*, 1900:6–1901:1).

However, the Court finds that Mr. Malek's expertise was attenuated and that he made unfounded assumptions about the affordable housing industry and what the FWPs planned to do with their properties upon repayment. (*Id.*, 1863:13–1865:2 (Mr. Malek did not know when the programs started or ended), 1865:9–1867:12, 1868:8–24 (Mr. Malek never met or talked to any of the FWPs or their partners), 1870:22–1872:15 (Mr. Malek struggled to recall material information about the FWPs properties), 1877:4–19). Mr. Malek specifically admitted that the programs "[weren't] part of the tax shelter industry that [he] dealt with." (*Id.*, 1885:18–23). The Court does not find Mr. Malek persuasive.

Ultimately, the Court determines the FWPs had objectively reasonable expectations to prepay their mortgages that align with industry expectations as a whole. However, only Silverlake and Cedar Gardens were also able to sufficiently demonstrate that their investors had subjective expectations to prepay. Even so, the inquiry does not end there.

B. Economic Impact

Broadly, measuring economic impact under the Preservation Statutes requires a comparison of "the value of the restriction to the value of the property as a whole . . . ." *Cienega X*, 503 F.3d at 1282. As discussed above, in *Cienega X*, the Federal Circuit detailed two possible approaches for measuring the economic impact on property owners who were unable to prepay. *Cienega X*, 503 F.3d at 1282. First, "a comparison could be made between the market value of the property with and without the restrictions on the date that the restriction began (the change in value approach)." *Id.* In the second approach, courts would "compare the lost net income due to the restriction (discounted to present value at the date the restriction was imposed) with the total net income without the restriction over the entire useful life of the property (again discounted to present value)." *Id.* However, neither of these approaches is "inherently better" than the other. *Id.* The Federal Circuit instructs that the value of the property is derived from "the property's ability to generate a future stream of rental income as of the prepayment date" rather than an "objective 'fair market value'" valuation. *Anaheim Gardens*, *L.P.*, 953 F.3d at 1354 (citations omitted).

The Federal Circuit has "held that any economic impact must be evaluated with respect to the value of the property as a whole, and not limited to the discrete time period that the taking was in force." *CCA Assocs.*, 667 F.3d at 1244 (citing *Cienega X*, 503 F.3d at 1280). Furthermore, economic impact on plaintiffs must be weighed against offsetting benefits received. *Id.* at 1245. The Federal Circuit has also held that "[a]lthough the plaintiff has the burden to prove a taking occurred, this ultimate burden does not require the plaintiff to identify and come forward with evidence rebutting economic harm." *Id.* Here, the FWPs restricted their proof to meet the latter "lost net income" approach. *See Cienega X*, 503 F.3d at 1282.

Law regarding just how much economic impact is enough to effectuate a compensable taking is not readily ascertainable. In *CCA Associates*, the Court noted that "[w]hile there is no per say rule, the economic impact must be more than a mere diminution." *CCA Assocs.*, 667 F.3d at 1246 (citing *Cienega VIII*, 331 F.3d at 1319). The *CCA Associates* Court was "aware of no

case in which a court has found a taking where diminution in value was less than [fifty] percent." *CCA Assocs.*, 667 F.3d at 1246 (citation omitted). Such a high threshold makes it "virtually impossible" for low-income housing investors affected by the Preservation Statutes "to establish the severe economic impact necessary for a takings." *CCA Assocs.*, 667 F.3d at 1246. The *CCA Associates* Court emphasized that "[r]ather than consider the impact the regulation had on the property during the time it was in effect . . . *Cienega X* requires that the impact be measured against the total value over the remaining life of the property." *CCA Assocs.*, 667 F.3d at 1246 (citing *Cienega X*, 503 F.3d at 1281–82 (elaborating that the test for a regulatory taking must "compare the value that has been taken from the property with the value that remains in the property . . . .") (internal citations omitted)). Additionally, the *CCA Associates* Court noted that:

> [T]he denominator for the takings analysis in [ELIHPA and LIHPRHA] cases is the total net income over the entire remaining useful life of the property (the net income over the rest of the mortgage—generally [twenty] years). If the net income over the entire remaining life of the mortgage is the denominator there is no way that even a nearly complete deprivation (say 99%) . . . would amount to severe economic deprivation when compared to our prior regulatory takings jurisprudence.

CCA Assocs., 667 F.3d at 1246–47.

Though the *Cienega X* guidance on establishing economic impact structures the analytical framework, the Supreme Court has encouraged flexibility. *See Hodel v. Virginia Surface Min. and Reclamation Ass'n, Inc.*, 452 U.S. 264, 295 (1981) ("These 'ad hoc, factual inquiries' must be conducted with respect to specific property, and the particular estimates of economic impact and ultimate valuation relevant in the unique circumstances.") (quoting *Kaiser Aetna v. United States*, 444 U.S. 164, 175 (1979)).

To determine the economic impact of the Preservation Statutes on the FWPs, the Court must rely on the testimony of the parties' experts, who offer wildly different measurements of the FWPs' economic losses. Dr. Wade calculated the percentages of economic impact for the FWPs' properties between 92% and more than 100%. (Rule 63 Hr'g Tr. vol. 1, Trout, 204:16–205:4, July 8, 2024). Dr. Riddiough calculated the percentages of economic impact between 5.9% and 27.4%. (Trial Tr. vol. 11, Riddiough, 2296:24–2297:9, Jan. 24, 2023). In order to begin the application of the first prong of *Penn Central* to this case, the Court has no choice but to make a credibility determination of each expert. After weighing the abundance of evidence presented at trial, oral argument, and throughout the enormous record, the Court finds Dr. Trout's explanations of Dr. Wade's methodology and conclusions not credible. In contradistinction, the Court finds Dr. Riddiough's methodology and conclusions to be credible.

In *Anaheim Gardens, L.P.*, the Federal Circuit found that Dr. Wade "attempt[ed] to prove the economic impact of the Preservation Statutes" consistent with the second approach in *Cienega X*. *Anaheim Gardens, L.P.*, 953 F.3d at 1354 (citing *Cienega X*, 503 F.3d at 1282). However, the Circuit went on to instruct this Court to assess the credibility of Dr. Wade's explanations. *Id.* at 1355 ("[Q]uestions remain as to whether Dr. Wade's methodology was consistent with principles of economics and whether his explanation for using that approach is credible."). In other words, the devil is in the details. Unfortunately, the Court cannot directly

assess the credibility of Dr. Wade and must instead make this determination based on the explanations provided by Dr. Trout. This assessment aligns with FWPs' insistence that the Court, newly assigned this action, hear anew Dr. Trout's testimony. (FWPs' Rule 63 Mot. at 1) (rehearing necessary "to provide testimony about two material and disputed issues, the severity of FWPs' injury and the economic losses suffered by FWPs."). The replay of that testimony, rather than aiding the FWPs, was to their detriment.

The "superiority of the trial judge's position" provides the adeptness necessary to make crucial credibility determinations. RCFC 52(a)(6); *Anderson v. City of Bessemer City, N.C.*, 470 U.S. 564, 575 (1985). In this instance, in addition to substantial pre-trial and post-trial briefing, the Court had the benefit of Dr. Wade's deposition, Dr. Trout's prior trial testimony, and the opportunity to assess Dr. Trout's earlier testimony by personally hearing his account of Dr. Wade's methodology. Thus, the Court had the unique opportunity to be made "aware of the variations in demeanor and tone of voice" that bear so heavily on the Court's understanding of what was said, as well as the admitted exhibits and those demonstratives used but not admitted. *Anderson*, 470 U.S. at 575; *see Wainwright v. Witt*, 469 U.S. 412 (1985) (citing *Marshall v. Lonberger*, 459 U.S. 422, 434 (1983) ("the exercise of [the] power of observation often proves the most accurate method of ascertaining the truth . . . . To the sophistication and sagacity of the trial judge the law confides the duty of appraisal.") (citation omitted)).

Moreover, when making such a credibility determination, there is no definitive list of factors a court must or should consider. In addition to the nearly unlimited factors commonly used to assess the probative value of lay witness testimony, consideration of the same factors involved in admissibility determinations can be useful in gauging expert testimony. *See* FED. R. EVID. 702; *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993); *Kumho Tire Co., Ltd. v. Carmichael,* 526 U.S. 137 (1999). In applying Rule 702, courts have found numerous factors relevant in the evaluation of whether expert testimony is sufficiently reliable for admission, including "too great an analytical gap between the data and the opinion proffered." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). As the Third Circuit held in *In re Paoli R.R. Yard PCB Litigation*, "any step that renders the analysis unreliable under the *Daubert* factors renders the expert's testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology." 35 F.3d 717, 745 (3d Cir. 1994) (discussing admissibility of expert testimony) (internal emphases omitted). Courts have held that "when an expert purports to apply principles and methods in accordance with professional standards, and yet reaches a conclusion that other experts in the field would not reach, the trial court may fairly suspect that the principles and methods have not been faithfully applied." FED. R. EVID. 702 (2000 Amendments Advisory Committee Notes); *see Lust v. Merrell Dow Pharm., Inc.*, 89 F.3d 594, 598 (9th Cir. 1996); *see also Standards and Procedures for Determining the Admissibility of Expert Testimony after Daubert*, 157 F.R.D. 571, 579 (1994) ("[W]hether the testimony concerns economic principles, accounting standards, property valuation or other non-scientific subjects, it should be evaluated by reference to the 'knowledge and experience' of that particular field."). In this instance, the admissibility of Dr. Wade's methodology was resolved long before trial, leaving the Court to evaluate the credibility of Dr. Wade's explanations, as explained by Dr. Trout, in the crucible of trial. *Anaheim Gardens, L.P.*, 953 F.3d at 1355; (Trial Tr. vol. 6, Trout, 1088:11–1270:11, Jan. 17, 2023; Trial Tr. vol. 7, Trout, 1282:4–1480:18, Jan. 18, 2023; Trial Tr. vol. 8, Trout, 1492:22–1534:22, Jan. 19, 2023; Trial Tr. vol. 14, Trout,

2754:22–2878:1, Jan. 30, 2023, Rule 63 Hr'g Tr. vol. 1, Trout, 6:10–217:3, July 8, 2024). The Court ultimately finds that Dr. Wade's methodology, as promulgated by Dr. Trout, was, at times, nearly incomprehensible and internally inconsistent. His mathematical contortions rendered inflated damages estimates which the Court does not credit.

The Court's overarching concern with Dr. Wade's methodology is the inconsistency of Dr. Trout's explanation of the inputs in FWPs' economic loss equation. Dr. Trout was unable to provide the Court with clear insight into the calculations made by Dr. Wade to arrive at his economic loss conclusions, and the Court is not persuaded that Dr. Wade's methods are consistent with principles of economics. FWPs argue that they used the formula supported by *Cienega X*, but in reality, their methodology is "highly inconsistent" and a "highly unreliable measure of economic impact." (Trial Tr. vol. 12, Riddiough, 2429:7–11, Jan. 25, 2023). Dr. Wade appeared to use multiple formulas, and a clear articulation of which formula was primarily utilized to calculate economic impact was neither identified by the FWPs nor independently found by the Court. Dr. Trout was asked about the difference between the two formulas. He first testified that the "meaning" of Dr. Wade's two formulas is "the same" but that the "words are a little different." (Trial Tr. vol. 7, Trout, 1328:19–1329:2, Jan. 18, 2023). Dr. Trout further testified that the two formulas "produce[] the same number in terms of the economic damages." (*Id.*, 1335:17–20). However, Dr. Trout later seemed to articulate that there *was* a difference between the two formulas, and struggled through an explanation:

> Def.'s Counsel: Dr. Trout, it was my understanding that you testified that both 1 and 1A both field the same result. Is that correct?
>
> Dr. Trout: They . . . produce the same result in terms . . . of an estimate of economic damages, but the values are different because in one case, you are subtracting . . . from the present value a fixed amount, the TPE, and that's called NPV. And in this . . . exhibit, PC.5, he is comparing . . . he is using, I'm sorry, equation number [one], he's looking at the NPV of the operating income less the TPE . . . well, no, that's not . . . let's see. I'm sorry. Let me rephrase that. He's taking the NPV of the operating income, less TPE, which is the NPV of the market conversion scenario, and then he's taking . . . he's subtracting out the NPV of the actual cash distributions less TPE. And so when he's looking at doing this reduction of NPV, he is comparing the NPVs, not the PVs. So there's a difference there. So the reduction of NPV is the NPV market conversion less the NPV actual outcome, divided by the NPV market conversion. That's the equation.

(*Id.*, 1336:2–23). Dr. Trout's explanation is not straightforward. (*See also* Rule 63 Hr'g Tr. vol. 2, Riddiough, 277:3–11, July 9, 2023 (Def.'s Counsel: "Did you find anywhere that Dr. Wade directly expresses the exact formula he was using to calculate economic impact or severity?" Dr. Riddiough: "Not the entire formula. There were some bits and pieces in various places, but never pulled together. I looked high and low and I couldn't find anything.")).

Furthermore, despite direct questioning from the Court, FWPs' counsel also failed to address Dr. Wade's apparent use of two separate formulas to calculate economic loss:

> The Court: Here is another one in [sic] his formulas, economic loss equals present value, which is the total net income, without the restriction over the entire useful life of the property, less the actual net income with the restriction, where PV equals discounted to present value at the date the restriction was imposed. That's one formula. The next formula, economic loss equals NPV (expected operating net income from conversion of market) less TPV minus NPV (actual cast [sic] distributions of outcome) less TPE. You-all didn't address the use of these different terms anywhere I could find in your briefing. How am I supposed to just accept . . . Dr. Trout saying that they mean all the same thing?
>
> [. . .]
>
> FWPs' Counsel: Well, I would submit, Your Honor, that part of the way to do that is to make an overall assessment, which I'm sure the Court will do, of its view of Dr. Trout's credibility.

(Hr'g Tr. 60:7–61:22, Oct. 15, 2024). Such an assessment does not relieve the substantial doubt created by Dr. Trout's testimony, Dr. Wade's deposition, and the attendant exhibits.

It is no wonder that Dr. Trout's explanation for using Dr. Wade's methodology contained irreconcilable gaps. At key points throughout his testimony, Dr. Trout was unable to explain certain numbers and formulaic inputs used throughout Dr. Wade's economic loss analysis. This was deeply frustrating and concerning for the Court, which was left unable to replicate or verify the economic loss numbers presented by Dr. Trout. (Trial Tr. vol. 7, Trout, 1378:20–1380:18, Jan. 18, 2023 (Dr. Trout was asked whether Dr. Wade's present value analysis offered "the value of the properties as of the prepayment date" and responded: "I don't believe [Dr. Wade] ever said that[,] which was later shown to be incorrect.)).

Dr. Trout was not able to adequately justify why Dr. Wade's formula subtracted TPE in the denominator of his economic loss equation. (*See id.*, 1426:24–1427:24). When questioned, Dr. Trout provided vague and contradictory answers. (*Id.*, 1421:23–1422:6 (When asked about his "independent opinion" about deleting TPE, Dr. Trout offered that it was necessary for the value to be "net of something," and that TPE represented the "starting point."); *id.*, 1422:7–1423:4 (Dr. Trout also testified that he did not "have an independent opinion" on why it makes sense to delete TPE from the denominator)). In other words, Dr. Wade's methodology, while ostensibly affirmed in principle by Dr. Trout, could not withstand cursory inquiry.

Furthermore, in his calculation of unrestricted present value, Dr. Wade subtracted only some debt payments from the overall property value. (*Id.*, 1405:19–25). Dr. Trout's equation deleted "all of the principal debt" but none of the interest debt, (*id.*, 1406:1–2), which Dr. Riddiough credibly testified resulted in a "weird hybrid value between a property and an equity value . . . ." (Trial Tr. vol. 12, Riddiough, 2424:22–2425:4, Jan. 25, 2023). Dr. Trout testified that Dr. Wade's choice to delete only the debt principle is not an industry-standard practice:

> Def.'s Counsel: Have you ever seen before the method of removing mortgage principal payments but leaving in interest payments?
>
> Dr. Trout: I have not . . .
>
> Def.'s Counsel: And you are not aware of anything in the economic or finance literature that supports Dr. Wade's approach of subtracting mortgage principal but not interest. Is that right?
>
> Dr. Trout: I'm not aware of any, that is correct.

(Trial Tr. vol. 7, Trout, 1406:7–1407:1, Jan. 18, 2023; *see* Rule 63 Hr'g Tr. vol. 1, Trout, 191:22–192:1, July 8, 2024).

Dr. Trout did not inspire confidence that subtracting debt in calculations of economic loss was methodologically correct, let alone subtracting only partial debt amounts. Dr. Trout noted that generally in his economic loss calculations he "would not subtract either interest or principal." (Trial Tr. vol. 7, Trout, 1407:11–17, Jan. 18, 2023). He also characterized debt as "an issue of how the property is financed, not about its operations." (*Id.*, 1409:1–4). When asked about subtracting debt from an economic impact analysis, Dr. Riddiough noted that "[t]he amount that's borrowed is really a side issue." (Trial Tr. vol 12, Riddiough, 2398:18–2399:15, Jan. 25, 2023). The Court cannot say with certainty whether subtracting debt when performing economic impact analysis is methodologically sound, but the Court is certainly not convinced by Dr. Trout's reasoning. The Court found Dr. Riddiough's testimony persuasive, concluding that even if Dr. Wade had consistently employed equity values in his equation, it still would not have accurately reflected the regulation's economic impact on the property. (Rule 63 Hr'g Tr. vol. 2, Riddiough, 270:1–277:1, July 9, 2024; *see also* DDM D at 30).

Additionally, Dr. Wade inconsistently utilized *ex post* and *ex ante* data in the same equation, which was not reasonably supported by Dr. Trout's testimony or general economic principles, especially in light of the other inconsistencies in Dr. Wade's formula inputs. Dr. Wade's general use of *ex post* data is not necessarily a problem. In fact, the Federal Circuit did not specifically "favor the use of outdated *ex ante* forecasts or projections over verifiable real-world *ex post* data." *Anaheim Gardens*, *L.P.*, 953 F.3d at 1357. FWPs properly point out that the Court of Claims and the Federal Circuit have previously approved the use of *ex post* data in other cases. (FWPs' Post-Trial Br. at 24 n.16, ECF No. 753 (citations omitted)). However, it is Dr. Wade's combination of *ex ante* and *ex post* data in the same equation that continues to trouble the Court. Dr. Wade incorporated *ex post* rental data from years after the prepayment eligibility date when calculating the unrestricted value of the FWPs' properties, (Trial Tr. vol. 7, Trout, 1356:10–14, 1356:19–1357:11, Jan. 18, 2023), but relied on *ex ante* data to calculate the restricted present value of the properties, (*see id.*, 1397:6–15; Trial Tr. vol. 12, Riddiough, 2382:12–16, Jan. 25, 2023).

Using the *ex post* data to include years of rapid rental growth appears to vastly overstate Dr. Wade's unrestricted present value for each of the FWPs. (*See*, *e.g.*, Trial Tr. vol. 12, Riddiough, 2431:21–2432:8, 2481:11–23, 2482:8–13, Jan. 25, 2023). In fact, Dr. Trout testified that Dr. Wade's use of *ex post* data reflected "a hypothetical scenario" that the Court cannot help

but find conveniently advantageous to the FWPs.[25] (Trial Tr. vol. 7, Trout, 1363:15–1364:23, Jan. 18, 2023). The use of *ex post* data allowed Dr. Wade to make assumptions about the rents, refinancing, and FWPs' hypothetical market conversions. (Trial Tr. vol. 11, Riddiough, 2309:4–13, Jan. 24, 2023 (Dr. Riddiough explaining that "what actually happened with these properties is not the same" as the regional *ex post* rental data incorporated in Dr. Wade and Dr. Trout's calculation)). Simultaneously, Dr. Wade used *ex ante* data to calculate restricted present value; specifically, the sums received by FWPs as part of the LIHPRHA process. (Trial Tr. vol. 7, Trout, 1398:24–1399:12, Jan. 18, 2023). Dr. Trout did not provide a credible explanation for Dr. Wade's mixed use of *ex ante* and *ex post* data:

> FWPs' Counsel: Now, you've testified already about ex post/ex ante data. What sort of data did you and Dr. Wade use in developing your opinions about the economic losses suffered by these plaintiffs?
>
> Dr. Trout: Both ex ante and ex post.
>
> FWPs' Counsel: And . . . why was it both ex ante and ex post?
>
> Dr. Trout: Because that's what they are.

(Rule 63 Hr'g Tr. vol. 1, Trout, 125:10–17, July 8, 2024; *see also* Trial Tr. vol. 14, Trout, 2844:25–22, Jan. 30, 2023 (Def.'s Counsel: "So, in fact, you and Dr. Wade mixed ex ante and ex post in the same analysis, right?" Dr. Trout: "Yeah . . . I do it in every case . . . .")).

The Court is also dissatisfied with Dr. Trout's explanation of how Dr. Wade arrived at the "discount rates" used throughout his economic loss analysis. Dr. Wade applied a "discount rate of 9.55[%] until 2001" and "6.9[%] after 2001 . . . ." (Trial Tr. vol. 7, Trout, 1342:6–1343:4, Jan. 18, 2023). Even though Dr. Trout adopted Dr. Wade's discount rates, Dr. Trout previously testified that a 9.47% discount rate was the "best" discount rate to use. (*Id.*, 1347:17–1348:3). In addition, the Court is not persuaded of the accuracy of Dr. Wade's calculations of "offsetting benefits" of the FWPs. FWPs' counsel confirmed that the only offsetting benefit incorporated into Dr. Wade's analysis was what the FWPs actually received from the LIHPRHA process. (Hr'g Tr. 63:16–25, Oct. 15, 2024). This is a far cry from the actual offsetting benefits received—FWPs did not cohesively articulate how the below market-rate interest, extended mortgage terms, and tax incentives factor in to the economic impact of the Preservation Statutes on the FWPs. It is not also clear to the Court whether Dr. Wade accounted for the rent FWPs received during the period at issue or the "reserves" that were incorporated by Dr. Riddiough.

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[25] Even the use of the term, *ex post* data distorts the actual inputs Dr. Wade used. For example, while Dr. Wade purported to use *ex post* data because it was more accurate than *ex ante* data, he actually used multiple hypothetical inputs including Buckman's rental income (Trial Tr. vol. 7, Trout, 1374:2–24, Jan. 18, 2023), laundry income, (*id.*, 1375:1–9), and total potential gross income after market conversion, (*id.*, 1375:10–21). Dr. Wade applied similar conjecture to each of the FWPs. (*Id.*, 1375:22–1376:9). These inputs, which FWPs suggest are preferred over *ex ante* data because they rest on post-conversion data, are really another projection and it is difficult for the Court to formulate a preference for one set of suppositions over the other.

Notably, Dr. Wade included "laundry income" in his calculations of lost future income for each of the properties. (*See* Rule 63 Hr'g Tr. vol. 1, Trout, 53:13–12, July 8, 2024). However, the Court cannot discern whether this laundry income was incorporated as an offsetting benefit during the years that FWPs continued to own the properties after the enactment of the Preservation Statutes but before their respective sales or agreement with HUD. (*See e.g., id.*, 53:12–17). Including laundry income, a relatively modest sum, while excluding rental income, proportionately a much more significant sum, is irreconcilable. It may be that Dr. Wade accounted for both, but trial testimony does not establish that he did so. If not, exclusion of rental income offends *Cienega X*, in which the Court noted that "[t]he benefits to the owners electing to enter into use agreements were also considerable . . . ." *Cienega X*, 503 F.3d at 1286. These were not the only issues with Dr. Wade's methodology that Dr. Trout struggled with. Dr. Trout frankly noted that while Dr. Wade consistently maintained that he did not value the properties themselves, his report stated otherwise: "it's contrary to what he said multiple times is that he never did a valuation of the properties." (Trial Tr. vol. 7, Trout, 1380:3–18, Jan. 18, 2023).

FWPs' counsel also struggled to correlate terms used by Dr. Wade throughout his economic impact analysis. (Hr'g Tr., 58:24–61:16, Oct. 15, 2024). Specifically, when asked to compare "percent reduction equals NPV projected outcome," "projected outcome with prepayment," and "NPV market conversion," FWPs' counsel responded only that "they do have an NPV component." (*Id.*). However, Dr. Trout told the Court that the terms "mean the same thing . . . with respect to this case." (*See* Rule 63 Hr'g Tr. vol. 1, Trout, 131:17–132:12, July 8, 2024). Throughout this case, the Court has tried again and again to dig through the complex economic-esque terms proffered by Dr. Trout. Rather than using these terms consistently, different variations of the same concepts are sprinkled throughout Dr. Trout's testimony and analysis. The Court is expected to take Dr. Trout's word that certain phrases are synonyms, but even FWPs' counsel is unable to articulate their meaning or even how they relate to one another. (*See* Hr'g Tr. 60:7–61:22, Oct. 15, 2024). On the surface, Dr. Trout's mélange of economic terminology appears to be a master class in obfuscation.

Significantly, during the Rule 63 Hearing, FWPs presented the Court with Chart SL.9B (Silverlake Present Value Net Operating Income) which was missing a column of numbers called the "interest factor." (Rule 63 Hr'g Tr. vol. 1, Trout, 88:21–94:25, July 8, 2024 (discussing PDM DD at 5)).[26] The flaw within this exhibit was immediately apparent. Dr. Trout could not clearly explain what the interest factor was or how the Court could verify the total numbers presented in Dr. Wade's lost income analysis. (*Id.*, 88:21–92:2 ("It's 0.4392 or something"), 92:15–20 ("there is a value of 0.439, it just doesn't show, and [Dr. Wade] might have hidden it for some strange reason or it might be over a couple of columns, but it's there, because that 0.439 is in the program itself . . . ."), 94:16–18 (The Court: "I'm not sure how we're getting to these numbers and there being no explanation of hidden columns."); Hr'g Tr. 61:15–16, Oct. 15, 2024 (FWPs' counsel noted that "[Dr. Trout] had the one exchange with the Court with regard to that one column that is odd.")).

When asked about this hidden column of information again at a separate hearing, FWPs' counsel encouraged the Court to find Dr. Trout credible based on his "forthright and frank

[26] The Chart SL.9B is reproduced on page 16 above.

testimony about the numbers[,]" but did not elaborate on the hidden column or how the Court could verify Dr. Wade's ultimate conclusions. (Hr'g Tr. 61:21–62:15, Oct. 15, 2024). Counsel's declaration that FWPs' expert is credible stands in stark contrast to the Court's assessment. Even if the Court determined that Dr. Trout's explanation of the deficiency in this exhibit was candid, that is not the issue. The issue critical to the resolution of damages is Dr. Wade's methodology as illuminated by his deposition testimony, and exhibits utilized by FWPs at trial. When the secondary expert, Dr. Trout, cannot understand or explain the primary expert's calculations, the Court's apprehension is validated.

The Court has considerable leeway in making a credibility determination regarding witness testimony. That is, after all, the purpose of trial and in accordance with the explicit instruction of the Federal Circuit. *Anaheim Gardens*, *L.P.*, 953 F.3d at 1355 (noting that "questions remain as to whether Dr. Wade's methodology was consistent with principles of economics and whether his explanation for using that approach is credible" which are subject to the trial court's evaluation of Dr. Wade's "credibility and persuasiveness"). Ultimately, the Court finds both Dr. Trout and Dr. Wade's methodology and testimony inconsistent and the results unreliable.

On the other hand, Dr. Riddiough's methodology for calculating economic loss was readily understandable and consistent with principles of economics. Dr. Riddiough clearly explained his methodology and the inputs he used to determine the economic losses for each of the FWPs' properties. Dr. Riddiough calculated economic impact using the change-in-value approach referenced in *Cienega X.* (Rule 63 Hr'g Tr. vol. 2, Riddiough, 344:16–24, July 9, 2024); *see Cienega X*, 503 F.3d at 1282. In his formula, Dr. Riddiough compared "the property value without the regulation" in the unrestricted world with "the property value under the restriction" of LIHPRHA using property value as the common unit of measurement throughout the numerator and denominator. (Rule 63 Hr'g Tr. vol. 2, Riddiough, 232:16–233:14, July 9, 2024). The resulting economic loss was then "scaled by the property value as a whole" in the unrestricted world. (*Id.*, 233:8–14). The unrestricted property value was driven by the appraisal value of the property, which was calculated according to the income approach by the United States' appraiser, Paula Konikoff. (*Id.*, 235:18–236:9, 239:5–10).[27] The unrestricted property

[27] FWPs characterize Ms. Konikoff's appraisals and the LIHPRHA appraisals as "outdated *ex ante* forecasts or projections." (FWPs' Post-Trial Br. at 24 (citing *Anaheim Gardens*, *L.P.*, 953 F.3d at 1357)). FWPs also attack Ms. Konikoff's credibility as an appraiser. (Pls.' Post-Trial Br. at ¶ 156). Those attacks are unavailing. As convincingly established at trial, she is a highly qualified expert in the field of appraisals. (*See* Trial Tr. vol. 10, Konikoff, 1956:4–1958:5, 1963:12–1964:20, 1977:20–1978:5, Jan. 23, 2023, ECF No. 672). FWPs argue that the LIHPRHA appraisals "were at odds with the essential assumptions of a standard appraisal for a variety of reasons" including: "(i) LIHPRHA sellers were not typically motivated; (ii) LIHPRHA sellers were well-informed or well-advised that they were *not* acting in their own best interest . . . and (iii) LIHPRHA property appraisals set by then-current supply and demand conditions are irrelevant where future use of the property is lost . . . ." (Pls.' Post-Trial Brief at 23, *See* Pls.' Post-Trial Proposed Finding of Fact at ¶¶ 88, 110). However, Ms. Konikoff testified extensively about retrospective appraisals and that they are generally restricted "to *ex ante* data" with a "limited exception" allowing use of *ex* post data "that would have been known by investors in

value also included the value of the capital expenditure reserves that would be released upon prepayment. (*Id.*, 236:10–23).

Unlike Dr. Trout, Dr. Riddiough clearly explained the offsetting benefits he incorporated into his analysis: the restricted property value also included the amount of previously restricted reserves that would be released upon sale, (*id.*, 252:22), and the income that property owners would receive while operating the property as affordable pending a sale, (*id.*, 252:23–253:2), all discounted back to the prepayment eligibility date, (*id.*, 253:3–8). However, below market-rate interest, extended mortgage terms, and tax benefits were not obviously included in Dr. Riddiough's analysis of offsetting benefits. Still, Dr. Riddiough's restricted property values reflect "the offsetting benefits that came to the property owners as a result of participating in the transfer preservation process, where the [FWPs] either chose the sale option or the use agreement option[,]" and were primarily based on the proceeds an owner would expect for the property with the LIHPRHA restriction. (*Id.*, 243:16–248:13). Furthermore, Dr. Riddiough consistently used *ex ante* information in his calculations of values in both the restricted and unrestricted world. (*See id.*, 240:6–243:9). Ultimately, Dr. Riddiough's methodology was consistent, replicable, and reliable.

Because the Court finds Dr. Riddiough's methodology credible, it accepts his measurements of economic loss for each of the FWPs. Dr. Riddiough determined just compensation of $1,396,410 for Cedar Gardens, $7,941,812 for Rock Creek, $1,055,982 for Silverlake, $1,225,617 for Buckman, and $744,795 for Chauncy House. (*Id.*, 342:15–18). As the Federal Circuit held in *Cienega X*, "our cases have established that a regulatory taking does not occur unless there are serious financial consequences." *Cienega X*, 503 F.3d at 1282. The Court has likened the "severe economic deprivation" standard to the standard of an actual taking, whereby "in essence, a claim that 'a taking has occurred because a law or regulation imposes restrictions so severe that they are tantamount to a condemnation or appropriation.'" *Id.* (citing *Rose Acre Farms*, *Inc. v. United States*, 373 F.3d 1177, 1195 (Fed. Cir. 2004)).

There is no exact threshold for establishing whether an economic impact is severe enough to warrant finding a regulatory taking. For example, in *CCA Associates*, the Court held that an economic impact of eighteen percent was not sufficient to establish a regulatory taking. *CCA Assocs.,* 667 F.3d at 1246–48. Conversely, in *Cienega VIII*, the Federal Circuit held that a seventy-seven percent loss of the value of the property was a compensable taking. *Cienega VIII*, 331 F.3d at 1343. Like the Federal Circuit, the Court here is unable to cite any cases that have found a taking where the economic impact was less than fifty percent. *See CCA Assocs.*, 667 F.3d at 1246. Dr. Riddiough calculated the percentage of economic impact on the FWPs to be between 5.9% and 27.4%. (Trial Tr. vol. 11, Riddiough, 2296:24–2297:9, Jan. 24, 2023). Even the high end of Dr. Riddiough's range does not approach the accepted diminution in value threshold to find that a taking occurred. Therefore, as constraining as the *Cienega X* and *CCA Associates*

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the market prior to or at the date of the appraisal . . . ." (Trial Tr. vol. 11, Konikoff, 2209:7–10, 2209:22–2210:15, 2213:5–9, Jan. 24, 2023, ECF No. 674). In fact, Dr. Wade used the LIHPRHA appraisals for FWPs' properties to identify "what the plaintiffs received" through LIHPRHA. (Wade Dep. 41:15–17; Pls.' Post-Trial Proposed Finding of Fact at ¶ 146).

analyses are on the ability to recover in takings cases generally, the Court finds the FWPs were not able to tip the scales of the economic impact element of *Penn Central* in their favor.

Importantly, FWPs do not directly challenge that the severity requirement is a threshold issue. FWPs tiptoe on both sides of the severity line, encouraging the Court to "weigh all relevant considerations" but also that "the economic impact on FWPs was severe." (FWPs' Post-Trial Br. at 17). Nowhere in FWPs' Post-Trial Brief, (*id.*), Post-Rule 63 Hearing Brief, (ECF No. 781), or at Oral Argument, (*see* ECF Nos. 641, 643, 645, 650, 653, 655, 658, 666, 670, 672, 674, 691, 693, 695, 777, 779, 790), do FWPs clearly articulate the law in such a way as to convince the Court that an economic impact of less than fifty percent is sufficient to establish a regulatory taking. If the FWPs will not attempt to articulate that a lower threshold might be appropriate, the Court will not do so on its own initiative.

IV. Conclusion

Much of the difficulty with the FWPs' approach could perhaps be attributed to the undeniable and unnecessary delay in reaching trial. While there is no precise standard to determine how much delay is too much, common sense suggests that avoidable delay is fraught with peril. Here, thirty-one years from Complaint to verdict has resulted in multiple judges, with each transition resulting in more delay, as well as understandably diminished witness recollection, and the loss of more than one desirable witness. Perhaps if Dr. Wade himself could explain the inconsistencies and gaps now evident in his methodology and conclusions, a different result would be warranted. Perhaps had some of the original investors survived to proffer their own testimony regarding their investment-based expectations, each FWP might have shouldered their burden. As it stands, both situations are speculative. The weight of the evidence, following decades of litigation, dictates otherwise.

Only two of the five FWPs (Cedar Gardens and Silverlake) demonstrated that their investment-backed expectations to prepay and convert their properties were reasonable and aligned with industry expectations as a whole. The remaining three (Chauncy House, Buckman, and Rock Creek) were not able to show that their investors had subjective expectations to prepay. None of the FWPs were able to demonstrate economic impact of ELIHPA and LIHPRHA with sufficient severity for the Court to find a compensable taking in this case. Dr. Wade's methodology for calculating economic impact contained myriad gaps. Dr. Trout was unable to explain these deficiencies. Because the Court found Dr. Riddiough credible and his methodology sound, the Court adopts his findings of economic impact. While no single element of the *Penn Central* test is dispositive, the Court finds that the lack of a substantial economic impact tips the scales against FWPs' claims. Therefore, the Court finds no taking.

Pursuant to RCFC 58, the Clerk is **DIRECTED** to enter final judgment in favor of the United States.

IT IS SO ORDERED.

s/ David A. Tapp
DAVID A. TAPP, Judge